Oil, Paint and Drug Reporter

The Market Authority Since 1871
Chemicals-Dyestuffs-Drugs-Paints-Oils-Fertilizers

September 17, 1928: Vol. 114: No. 12 — 12 Gold Street, New York, N. Y.

ALCOHOL

PURE AND DENATURED

REPRESENTATIVES CARRYING WAREHOUSE STOCKS—
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Refiners of Methanol
BUFFALO, N. Y.

WM. S. GRAY & CO.
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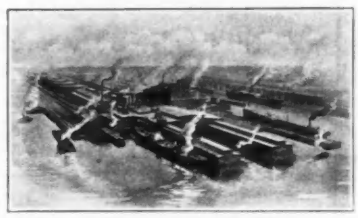
NEW YORK CITY

METHANOL
ALL GRADES
METHYL ACETONE



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Samples on request
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Oil, Paint and Drug Reporter

The Market Authority Since 1871
Chemicals-Dyestuffs-Drugs-Paints-Oils-Fertilizers

Founded October 18, 1871, by William O. Allison

Entered as second-class matter, January 15, 1884, at the Post Office at New York, N.Y., under the act of March 3, 1879

Comprising Drug, Paint and Oil Trade, New York Drug Bulletin, Weekly Drug News, New York Druggists' Price Current, Soap Maker's Journal, Oil and Paint Review, International Petroleum Reporter

Published every Monday by Oil, Paint and Drug Reporter, Inc., 12 Gold Street, New York; Telephone, John 2357; Cable Address, Reporter, N. Y.

Harry J. Schnell, President and Treasurer; Frank V. Baldwin, Vice-President; Daniel G. Bogert, Secretary.

Closing Dates—Display advertisements, Thursday noon; classified advertisements, Friday noon.

Advertising rates furnished upon application; questionable advertisements refused.

Subscription Price per Year: United States, $5; Canada, $7; other foreign countries, $10; payable in advance.
Address all communications to, and make all remittances payable to Oil, Paint and Drug Reporter, Inc.

Latest Market Developments

Barium Chloride Advanced

Domestic producers of barium chloride raised their prices for car-lot quantities to a minimum of $63 per ton at the close of last week. For less than car lots they were quoting up to $70 per ton.

Tartaric acid has not followed the recent upward revision in cream of tartar and tartar emetic, being maintained by the producers at 38c. per pound for the crystals or powdered in barrels.

Coaltar Intermediates Livelier

An improving demand was noted throughout the coaltar intermediate lines at the close of last week.

Shellac Market Excited

Cables from Calcutta reported the shellac market to be excited under influence of an advancing movement. T. N. for shipment was quoted at 47½c. per pound c.a.f. New York. London was higher at 225s. to 226s. per hundredweight for October and 217s. 6d. to 218s. 6d. for December.

Neutral Oils Lower

OIL CITY, Pa., Sept. 15, 1928.

Pennsylvania refiners today reduced neutral oil prices ¼c. per gallon.

Dried Blood Lower

Dried blood was quoted 5c. per unit lower on spot at $4.65 per unit Saturday morning. Demand continued quiet along routine lines.

Venezuela Oil Output Off

August production of crude petroleum in Venezuela, according to O'Shaughnessy's South American Oil Reports, was 9,031,052 barrels, a drop of 366,489 barrels from the record production of the previous month, and comparing with 5,290,807 barrels produced in August, 1927.

Manila Copra

WASHINGTON, Sept. 14, 1928.

The copra market remains steady at Manila, according to a cable from the American trade commissioner, dated September 13. Arrivals have decreased slightly. All mills are operating. Provincial equivalent for resecado delivered at Manila is 11½ pesos per picul; Hondagua, 11 pesos; Cebu, 11⅝ pesos.

Dallas Cottonseed

DALLAS, Sept. 14, 1928.

Prime cottonseed, delivered Dallas, is $32 per ton; prime crude cottonseed oil, 7⅞c. per pound. Forty-three percent cake and meal, f.o.b. Dallas, is $36 per ton; hulls, $6 per ton; mill-run linters, 4c. to 5c. per pound. The weather is warm; the market dull.

Memphis Cottonseed

MEMPHIS, Sept. 14, 1928.

For the first time this week, 8c. per pound was paid today for Valley crude cottonseed oil, but not much came out. Mills claim that, at present prices of seed, there is no profit in crude oil at 8c. The movement of seed has been very light to date; most mills have sold against what seed they have received. The crop is continually deteriorating, Dallas News estimating the Texas crop at 4,100,000 bales, against 5,100,000 in last government estimate. Cottonseed meal, 41 percent protein is $37.50 per ton, basis Memphis. Demand for meal is good.

Cottonseed Oil Closing Prices

Saturday the market was irregular within small limits.

Closing prices were:—

	Sept. 15.	Sept. 8.
September	9.75@ 9.85	10.35@10.75
October	9.85@—	10.37@10.40
November	9.63@ 9.75	10.30@10.40
December	9.70@ 9.71	10.28@—
January	9.76@ 9.78	10.34@10.40
February	9.75@ 9.88	10.30@10.45
March	9.92@—	10.45@—
April	9.95@10.05	10.40@10.70
Spot	9.75@—	10.35@10.75
Crude	8.00@ 8.05	8.50@ 8.75

Sales, 2,100 barrels; week's total, 83,900 barrels; since January 1, 3,762,400 barrels.

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Everybody's next-door neighbor

NOT that we're actually waiting on your doorstep. That would be presumptuous. But we're near enough to put *goods* on your doorstep in short order.

Out of a convenient warehouse, by truck or tank car or special messenger —any quantity of any alcohol product, *on the jump*. And each product guaranteed uniform in quality, which means that you can standardize your own.

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Bisulphite Soda
Baker & Adamson Quality Reagents and C. P. Acids
Insecticides and Fungicides

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BUFFALO · CHICAGO · CLEVELAND · DENVER · LOS ANGELES
PHILADELPHIA PITTSBURGH · PROVIDENCE · SAN FRANCISCO · ST LOUIS
THE NICHOLS CHEMICAL COMPANY, LIMITED, MONTREAL

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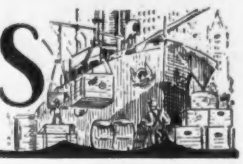
IMPORTS, EXPORTS, CHARTERS



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Imports at New York

ACID, CRESYLIC—10 dms, 8,000 lbs, A Hurst & Co, Caledonia, Glasgow
30 dms, 24,000 lbs, The Tar Acid Refg Corpn, Baltic, Liverpool
OXALIC—24 cks, Roessler & Hasslacher Chem Co, Anaconda, Rotterdam
TARTARIC—10 kgs, 1,120 lbs, E M Javitz & Son, Carmania, London

AGAR AGAR—15 bls, 3,000 lbs, Shima Trading Co, Havana, Osaka

ALBUMEN, EGG—55 cs, 11,000 lbs, T M Duche & Sons, Havana, Hankow
56 cs, 11,200 lbs, E Geperich & Co, Havana, Taku Bar
28 cs, 5,600 lbs, Bertolino & Co, Havana, Taku Bar

ALMOND MEAL—100 cs, 12,700 lbs, Central Union Trust Co, American Farmer, London

ALUMINUM COMPOUND—2 cks, Interstate Chem Co, Ryndam, Rotterdam

AMMONIA, CARBONATE, LUMP—25 cks, 15,125 Roessler & Hasslacher Chem Co, Anaconda, Rotterdam
NITRATE—38 cks, Kuttroff, Pickhardt & Co, Stavangerfjord, Oslo
SULPHIDE—10 cs, Solvay Sales Corpn, Baltic, Liverpool

AMMONIAC SAL—60 cks, 37,532 lbs, Kuttroff, Pickhardt & Co, Anaconda, Rotterdam

ANTIMONY, CRUDE—200 cks, Charles Gitlan & Co, Caucasier, Antwerp
ORE—604 bgs, Watson, Geach & Co, Inc, Primero, Buenos Aires
359 bgs, Watson, Geach & Co, Inc, Aconcagua, Antofogasta
874 bgs, Watson, Geach & Co, Inc, Aconcagua, Valparaiso
OXIDE—100 cks, Charles Gitlan & Co, Caucasier, Antwerp
250 bgs, Metal & Termit Corpn, Havana, Hankow
REGULUS—110 cks, Charles Gitlan & Co, Caucasier, Antwerp

ARSENIC, WHITE—200 cs, A Klipstein & Co, Havana, Kobe

ARTISTS' MATERIAL—22 cs, Gallagher & Ascher, Ryndam, Rotterdam
2 cs, Winsor & Newton, Inc, Minnesota, London

ASBESTOS—36 bgs, Porto Rican Express Co, Western Knight, Capetown

BALSAM, TOLU—11 cs, 1,100 lbs, Spanish-American Com Co, Inc, Zacapa, Santa Marta

BARIUM CARBONATE—28 cks, Innis, Speiden & Co, Caledonia, Glasgow
CHLORIDE—70 kgs, R W Greef & Co, Caucasier, Antwerp
NITRATE—43 cks, Monmouth Chem Corpn, Muenchen, Bremen

BARK, MEDICINAL—20 bgs, 2,200 lbs, S B Penick & Co, Inc, New York, Hamburg
WATTLE—2,093 bgs, 359,975 lbs, The Tannin Corpn, Western Knight, East London
1,073 bgs, 102 tons, 3 cwt, 3 qrs, 20 lbs, Standard Bank South Africa, Western Knight, Durban
1,791 bgs, 169 tons, 8 cwt, 3 qrs, Hammond & Carpenter, Western Knight, Durban
285 bgs, 25 tons, 1 cwt, 12 qrs, National Leather Co, Western Knight, Durban

BARYTES—800 bgs, 88,000 lbs, M A Boet & Co, Livenza, Genoa
720 bgs, 88,501 lbs, Smith Color & Chem Co, Livenza, Genoa

BEANS, CASTOR—16,222 bgs, 56,777 bus, Ralli Bros, West Honaker, Calcutta
22 bgs, 77 bus, W & A Leaman, Astrea, Port de Paix
12 bgs, 42 bus, W & A Leaman, Martinique, Port de Paix
58 bgs, 203 bus, Huttlinger & Struller, Martinique, Gonaives

COCOA—47 bgs, Huttlinger & Struller, Astrea, Jeremie
94 bgs, W & A Leaman, Astrea, Jeremie
61 bgs, Schutte & Focke, Astrea, Jeremie
750 bgs, various consignees, Amor, Pt Cabello
135 bgs, Schutte & Focke, Astrea, Jeremie
250 bgs, Daarnhouwer & Co, Biboco, Trinidad
300 bgs, W R Grace & Co, Mayaro, Trinidad
550 bgs, various consignees, Mayaro, Trinidad
39 bgs, Huttlinger & Struller, Martinique, Jeremie
32 bgs, Schutte & Focke, Martinique, Jeremie
52 bgs, Fruit Dispatch Co, Ulua, Pt Limon
16 bgs, Nieschlag & Co, Tachira, Maracaibo
250 bgs, Schall Pavenstedt & Co, Tachira, Pt Carello
300 bgs, Yglesias & Co, Tachira, La Guaira

VANILLA—56 cs, 9,800 lbs, Thurston & Braidich, Havana, Vera Cruz
6 cs, 1,050 lbs, H Triest & Co, Havana, Vera Cruz
104 cs, 13,565 lbs, W T Rawleigh Co, Cabo Espartel, Marseilles

BLANC FIXE, POWDERED—134 bgs, Innis, Speiden & Co, Anaconda, Rotterdam

BLEACHERS TINT—5 cks, A De Ronde & Co, Baltic Liverpool

BRISTLES—50 cs, Chesnut Cooper & Co, Greystoke Castle, Hankow
12 cs, Chesnut Cooper & Co, American Farmer, London
8 cs, M Broverman, Sarcoxie, Havre
3 cs, F H Cone & Co, Inc, Sarcoxie, Havre
66 cs, Huesmann & Co, Havana, Dairen
19 cs, F W Von Stade, Havana, Dairen
4 cs, Davies, Turner & Co, Minnesota, London
7 cs, Globe Shipping Co, New York, Hamburg

BRONZE POWDER—7 cs, National City Bank, Lapland, Antwerp
14 cs, T Riesner, Muenchen, Bremen
10 cs, B F Drakenfeld & Co, Muenchen, Bremen
9 cs, Leo Uhlfelder & Co, Muenchen, Bremen
10 cs, A C Rempert & Co, Muenchen, Bremen
19 cs, J E Mandlik, Muenchen, Bremen
1 cs, Titan Shipping Co, Muenchen, Bremen
10 cs, A C Rempert & Co, New York, Hamburg
16 cs, A C Rempert & Co, George Washington, Bremen
26 cs, B F Drakenfeld & Co, George Washington, Bremen

BUTYL ACETATE—250 dms, 240,985 lbs, Kuttroff, Pickhardt & Co, Anaconda, Rotterdam

CAPSICUM—82 bls, D L Silverman, West Loquassuck, Bombay

CASEIN—824 bgs, 110,088 lbs, American British Chem Supply Co, Primero, Buenos Aires
1,251 bgs, 165,132 lbs, T M Duche & Sons, Primero, Buenos Aires
417 bgs, 55,044 lbs, American British Chem Supply Co, Primero, Buenos Aires
417 bgs, 55,044 lbs, Rocamora & Co, Primero, Buenos Aires
250 bgs, Atterbury Bros, Rochambeau, Havre
200 bgs, Karolith Corpn, Rochambeau, Havre
211 bgs, D C Andrew & Co, New York, Hamburg
417 bgs, 55,044 lbs, American British Chem Supply Co, Phidias, Buenos Aires
250 bgs, 30,000 lbs, consignee to follow, Phidias, Buenos Aires
235 bgs, Casein Mfg Co, West Loquassuck, Bombay

CASSIA—50 bls, 4,000 lbs, Knickerbocker Mills Co, Greystoke Castle, Hongkong
100 bls, 8,000 lbs, Archibald & Lewis Co, Greystoke Castle, Hongkong
250 bls, 20,000 lbs, Van Loan & Co, Havana, Canton
350 bls, 28,000 lbs, New York Trust Co, Havana, Canton
95 bls, 7,600 lbs, Knickerbocker Mills Co, Blommersdijk, Padang
236 bls, 18,880 lbs, B H Old & Co, Blommersdijk, Padang

FISTULA—5 bbls, J W Lyon & Co, Tachira, San Juan

CHALK, BLOCK—825,000 kilos, 1,815,000 lbs, J W Higman Co, Sarcoxie, Dunkirk
PRECIPITATED—300 bgs, 22 tons, 15 cwt, 1 qr, 12 lbs, H J Baker & Bro, Samaria, Liverpool

CHARCOAL, POWDERED—139 dms, 25,042 lbs, R W Greef & Co, New York, Hamburg

CHEMICALS—72 cks, H Sundheimer, Inc, Carmania, London
10 cs, 1,040 lbs, Merck & Co, American Farmer, London
21 cs, Burroughs, Welcome & Co, American Farmer, London
10 cs, Philipp Bros, Stockholm, Gothenburg
25 cs, Mallinckrodt Chem Works, Stockholm, Gothenburg
4 cs, Sandoz Chem Works, France, Havre
33 cs, E Fougera & Co, France, Havre
6 cs, Carbic Color & Chem Co, France, Havre
7 cs, State Forwarding & Shipping Co, France, Havre
11 cs, G J Wallan, France, Havre
4 cs, Mallinckrodt Chem Works, France, Havre
27 bgs, Th Goldschmidt Corpn, Ryndam, Rotterdam
4 cs, Merck & Co, Ryndam, Rotterdam
22 cks, Merck & Co, Ryndam, Rotterdam
77 cks, Hummel & Robinson Corpn, Ryndam, Rotterdam
25 cs, Winthrop Chem Co, Ryndam, Rotterdam
50 demij, American Bluefriesveen, Inc, Ryndam, Rotterda
30 cks, General Dyestuff Corpn, Ryndam, Rotterdam
16 dms, General Dyestuff Corpn, Ryndam, Rotterdam
50 bottles, General Dyestuff Corpn, Ryndam, Rotterdam
147 cks, 116,087 lbs, Earle & Co, Anaconda, Rotterdam
50 bgs, 11,000 lbs, A Klipstein & Co, Anaconda, Rotterdam
100 cks, 15,892 lbs, Stanley Doggett, Inc, Anaconda, Rotterdam
20 cks, 11,961 lbs, A Klipstein & Co, Anaconda, Rotterdam
250 dms, 233,142 lbs, Kuttroff, Pickhardt & Co, Anaconda, Rotterdam
6 cs, T M Duche & Sons, Rochambeau, Havre
10 cs, Lo Curto & Funk, Minnesota, London
720 dms, 42,768 lbs, Innis, Speiden & Co, New York, Hamburg
10 cs, Leeben Chem Co, New York, Hamburg
4 cs, Jungmann & Co, New York, Hamburg
10 cs, Pfaltz & Bauer, New York, Hamburg
21 cs, Pfaltz & Bauer, Yorck, Breen
100 cks, Pfaltz & Bauer, Yorck, Bremen
100 cks, Roessler & Hasslacher Chem Co, Yorck, Bremen
350 bgs, H W Peabody & Co, Yorck, Bremen
50 bbls, 22,682 lbs, Hummell & Robinson Corpn, George Washington, Bremen
100 bgs, 2,750 lbs, Ehrmann, Strauss & Co, New York, Hamburg

CHILLIES—100 bbls, D L Silverman, West Loquassuck, Bombay
59 bls, D L Silverman, West Loquassuck, Bombay

CINNABAR—2 cs, 457 lbs, A Hurst & Co, Livenza, Leghorn

CLAY—482 bgs, Milton Greenebaum, Ryndam, Rotterdam
RAW—5 cks, J Goebel & Co, George Washington, Bremen

CLOVES—102 bgs, 11,275 lbs, Knickerbocker Mills Co, Cabo Espartel, Marseilles

COBALT OXIDE—10 cs, Perry Ryer & Co, Baltic, Liverpool

COCONUT—146 bgs, 14,600 lbs, Franklin Baker Co, Miraflores, Port Antonio
40 bgs, 4,000 lbs, Banana Sales Cornp, Miraflores, Port Antonio
153 bgs, 15,300 lbs, Di Giorgio Fruit Corn, Atlantida, Kingston
250 bgs, 25,000 lbs, A S Lascelles & Co, Atlantida, Kingston
63 bgs, 6,300 lbs, Thomas Scott & Co, Inc, Mayaro, Demerara

COCONUT—1,100 bgs, 110,000 lbs, Franklin Baker Co, Cristobal, Cristobal
600 bgs, 60,000 lbs, M A De Leon & Co, Cristobal, Cristobal
3 bgs, 300 lbs, Franklin Baker Co, Mayari, Kingston
34 bgs, 3,400 lbs, Liberty Fruit Dist, Inc, Coamo, San Juan
250 bgs, 25,000 lbs, Barclay Bank, Mayari, Bowder
1,126 bgs, 112,600 lbs, Barclay Bank, Mayari, Port Antonio
2,541 bgs, 254,100 lbs, Franklin Baker Co, Mayari, Port Antonio
1,928 bgs, 192,800 lbs, Franklin Baker Co, Tachira, San Juan
54 bgs, 5,400 lbs, M A De Leon & Co, Tachira, San Juan
470 bgs, 47,000 lbs, J Simon & Co, Tachira, San Juan
200 bgs, Banana Sales Corpn, St Mary, Annatto
88 bgs, F W Bussing & Co, San Juan, Mayaguez
100 bgs, C V Smith & Co, San Juan, Aquadilla

DESIC—250 cs, 32,500 lbs, W R Grace & Co, West Honaker, Colombo
150 cs, 19,500 lbs, Dodwell & Co, Greystoke Castle, Colombo

COLORS—2 cs, B F Drakenfeld & Co, France, Havre
3 bbls, A Hurst & Co, New York, Hamburg
3 cs, A Hurst & Co, New York, Hamburg
2 cs, Leo Uhlfelder & Co, George Washington, Bremen
1 cs, A V Berner & Co, George Washington, Bremen
1 ck, A V Berner & Co, George Washington, Bremen

ALIZARIN—12 cks, General Dyestuff Corpn, Ryndam, Rotterdam
2 cs, General Dyestuff Corpn, Ryndam, Rotterdam
18 cks, General Dyestuff Corpn, Anaconda, Rotterdam
1 dm, General Dyestuff Corpn, Anaconda, Rotterdam
2 cs, General Dyestuff Corpn, Anaconda, Rotterdam

ANILIN—7 dms, American Exchange Irving Trust Co, Lapland, Antwerp
31 cks, The Ciba Co, Inc, France, Havre
14 cks, The Geigy Co, Inc, France, Havre
49 dms, Sandoz Chem Works, France, Havre
2 cs, General Dyestuff Corpn, Ryndam, Rotterdam
33 dms, General Dyestuff Corpn, Ryndam, Rotterdam
49 cks, General Dyestuff Corpn, Ryndam, Rotterdam
131 cks, General Dyestuff Corpn, Anaconda, Rotterdam
22 cs, General Dyestuff Corpn, Anaconda, Rotterdam
13 dms, General Dyestuff Corpn, Anaconda, Rotterdam
48 cks, Grasselli Dyestuff Corpn, Anaconda, Rotterdam
16 cks, The Ciba Co, Inc, Rochambeau, Havre
17 cks, General Dyestuff Corpn, New York, Hamburg
1 cs, General Dyestuff Corpn, New York, Hamburg

DRY—20 cs, R F Downing & Co, Carmania, London
2 cs, A V Berner & Co, Muenchen, Bremen
4 cks, A V Berner & Co, Muenchen, Bremen
50 cks, C J Osborn & Co, George Washington, Bremen

EARTH—4 cks, Reichard Coulston, Inc, Caucasier, Antwerp
28 cks, 10,128 lbs, R Faust, Anaconda, Rotterdam
25 cks, Hummel & Robinson Corpn, Muenchen, Bremen

COPRA—59 bgs, 7,670 lbs, Franklin Baker Co, Mayari, Port Antonio
26 bgs, 3,380 lbs, Franklin Baker Co, Tachira, San Juan

CORK SHAVINGS—165 bls, 16,500 lbs, Lawrence Johnson & Co, Frederick VIII, Oslo
525 bls, 22,500 lbs, Lawrence Johnson & Co, Blommersdijk, Algiers

CRESOL, SOLID—13 kegs, The Tar Acid Refg Corp, Baltic, Liverpool
1 cs, Te Tar Acid Refg Corp, Baltic, Liverpool

CUTTLEFISH BONES—46 straps, Frank Vliet Co, Inc, Helen, Maseilles

DEXTRIN—150 bgs, 33,000 lbs, Jos Morningstar & Co, Frederik VIII, Oslo

DRAGONS BLOOD—10 cs, R Hilliers Son Co, West Loquassuck, Bombay

DUTCH METAL—1 cs, B F Drakenfeld & Co, Munchen, Bremen
3 cs, B F Drakenfeld & Co, George Washington, Bremen

DYEWOOD CUTTED—25 bls, Wm Benkert & Co, Tergestea, Trieste

EARTH, INFUSORIAL—715 bgs, Orelite Co, Inc, Liberty Land, Oran

EGG YOLK—22 cs, 4,400 lbs, K Bandekon, Havana, Hankow

EPSOM SALT—200 bgs, 44,000 lbs, Innis, Speiden & Co, Ryndam, Rotterdam
500 bgs, 110,000 lbs, Innis, Speiden & Co, Munchen, Bremen
350 cks, The Goldschmidt Corp, Yorck, Bremen
100 bgs, 22,200 lbs, The Goldschmidt Corp, Yorck, Bremen

ETHYL ACETOACETATE—18 pkgs, 3,174 lbs, Kuttroff, Pickhardt & Co, Anaconda, Rotterdam

FLAXSEED—36,498 bgs, 80,295 bus, L Dreyfus & Co, Cavour, Rosario
16,501 bgs, 36,302 bus, Pittsburgh Plate Glass Co, Primero, Buenos Aires
8,629 bgs, 18,983 bus, Brown Linseed Co, Primero, Buenos Aires
20,992 bgs, 46,182 bus, L Dreyfus & Co, Phidias, Buenos Aires

FLOWERS, MEDICINAL—15 bls, J L Hopkins & Co, Hellen, Marseilles
2 bgs, 220 lbs, S B Penick & Co, Inc, New York, Hamburg

SAFFRON—1 cs, 107 lbs, Hudson Tea Co, Cabo Espartel, Barcelona
1 cs, 107 lbs, S B Penick & Co, Inc, Cabo Espartel, Barcelona

FLUORSPAR—1,300 tons, Wm M Muller & Co, Helen, Toulon
103 tons, 13 cwt, 2 qrts, 18 lbs, Corn Exchange Bank, Western Knight, Durban

GELATIN—61 bbls, Delft Gelatine Works, Ryndam, Rotterdam
10 bls, Knox Hat Co, Hellen, Marseilles
20 bls, Knox Hat Co, Cabo Espartel, Marseilles
10 cs, T W Dunn Co, George Washington, Bremen

GLASS, PLATE—8 cs, L Solomon & Son, Caucasier, Antwerp
25 cs, Brown Bros & Co, Caucasier, Antwerp
41 cs, National Mirror Works, Caucasier, Antwerp
3 cs, Bendit, Drey & Co, Caucasier, Antwerp
2 cs, Bienenfeld Importing Co, Caucasier, Antwerp
34 cs, Schienk & Co, Lapland, Antwerp
10 cs, Nathan Lyon, Lapland, Antwerp
14 cs, Mark Bros, Lapland, Antwerp
37 cs, Semon, Bache & Co, Lapland, Antwerp
2 cs, Bostock Rhoades & Co, Lapland, Antwerp
27 cs, L Solomon & Son, Lapland, Antwerp
29 cs, Mark Bros, Lapland, Antwerp
15 cs, L Solomon & Son, Lapland, Antwerp
6 cs, Semon, Bache & Co, Lapland, Antwerp
7 cs, Semon, Bache & Co, George Washington, Bremen
36 cs, Lazard Bros, George Washington, Bremen

WINDOW—4,080 cs, Royal Glass Works, Caucasier, Antwerp
59 cs, Pittsburgh Plate Glass Co, Caucasier, Antwerp
93 cs, Absoer Realty Corp, Caucasier, Antwerp
50 cs, Bienenfeld Importing Co, Caucasier, Antwerp
45 cs, Manufacturers Trust Co, Caucasier, Antwerp
87 cs, Brown Bros & Co, Lapland, Antwerp
35 cs, Leo Popper & Co, Lapland, Antwerp
440 cs, Semon, Bache & Co, Lapland, Antwerp
65 cs, Myer Plato Glass Co, Lapland, Antwerp
22 cs, Semon, Bache & Co, Munchen, Bremen
18 cs, Mark Bros, New York, Hamburg
129 cs, Farmers Loan & Trust, Baltic, Liverpool
15 cs, Morris Glass Co, Baltic, Liverpool
24 cs, Leo Popper & Son, Baltic, Liverpool
1 cs, Semon, Bache & Co, George Washington, Bremen

GLAUBER SALT—250 cks, A Klipstein & Co, Munchen, Bremen

GLUE—100 bgs, National Adhesive Corpn, Carmania, London
11 pkge, Heemsoth & Basse, Rochambeau, Havre
20 bls, Rex & Reynold, Cabo Espartel, Marseilles
100 bgs, Milligan & Higgins Glue Co, Sinaia, Constanza

MARINE—24 crts, L W Ferdinand & Co, American Farmer, London
27 cs, L W Ferdinand & Co, American Farmer, London
2 tins, L W Ferdinand & Co, American Farmer, London

GRAPHITE—500 bgs, 110,000 lbs, Milton Snedeker Corpn, Cabo Espartel, Genoa
604 bgs, 112,420 lbs, C E Pettinos, Cabo Espartel, Marseilles

AMORPHOUS—600 cks, G F Pettinos, Havana, Moji

GREASE, WOOL—30 bbls, Swan-Finch Oil Co, Scythia, Liverpool
100 cks, A Klipstein & Co, Muenchen, Bremen
300 bbls, Standard Oil Co, Muenchen, Bremen

GUM, ALOES—200 cs, R Desvernine, Amor, Curacao
200 cs, Selma Mercantile Corpn, Tachira, Curacao
100 cs, De Sola Bros & Pardo, Tachira, Curacao

ARABIC—67 bgs, G V Smith, West Loquassuck, Bombay

ASAFETIDA—13 cs, F W Mead & Co, Jalapa, Bombay

CHICLE—2 bls, H Triest & Co, Havana, Vera Cruz

COPAL—138 baskets, Gravenhorst & Co, Greystroke Castle, Macassar
418 baskets, L C Gillespie & Sons, Greystroke Castle, Macassar
140 bgs, L C Gillespie & Sons, Greystroke Castle, Macassar
74 bgs, G H Lincks, Greystroke Castle, Macassar
100 bgs, W H Scheel, Lapland, Antwerp
19 bgs, J D Lewis, Lapland, Antwerp
510 bgs, S Winterbourne & Co, Lapland, Antwerp
28 bgs, G W S Patterson & Co, Lapland, Antwerp
158 baskets, France, Campbell & Darling, Blommersdijk, Akolama
7 cs, France, Campbell & Darling, Blommersdijk, Akolama
125 bgs, Innes & Co, Blommersdijk, Macassar
531 baskets, Innes & Co, Blommersdijk, Macassar
228 bgs, Paterson, Boardman & Knapp, Blommersdijk, Macassar
78 baskets, Bank of United States, Blommersdijk, Macassar
144 baskets, L C Gillespie & Sons, Blommersdijk, Macassar
224 baskets, Manufacturers' Trust Co, Blommersdijk, Macassar
246 baskets, T G Cooper & Co, Blommersdijk, Macassar

DAMMAR—211 baskets, L C Gillespie & Sons, Greystroke Castle, Macassar
186 cs, innes & Co, Greystroke Castle, Batavia
50 cs, Manufacturers' Trust Co, Greystroke Castle, Batavia

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Oil, Paint and Drug Reporter, Inc.

Current Prices are now printed in connection with the Market Reports. See index, page 2.

"See American First"

THERE are slogans which epitomize the truth . . . reveal it in a flash of inspiration.

Such is "See American First". It is not synthetic. Rather, it interprets a condition . . . a desirable procedure of which discerning buyers will be prompt to avail themselves.

What gives this slogan its convincing force? Is it that three* producing plants are maintained at Philadelphia, Gretna, La. and the grain-belt city of Pekin, Ill. . . that a net-work of distributing warehouses assures always prompt deliveries . . that "American" specializes in the manufacture of *all* grades of Alcohol?

Yes, all these, and furthermore that "American" gives strict attention to the requirements and the interests of consumers of Alcohol.

AMERICAN ALCOHOL — BRAND — DENATURED — AMERICAN COMMERCIAL ALCOHOL CORPORATION

MANUFACTURERS, BY AN EXCLUSIVE PROCESS, OF

EVERCLEAR ALCOHOL

THE ABSOLUTELY PURE, ODORLESS, COLORLESS ALCOHOL.

"SEE AMERICAN FIRST"

COMMERCIAL ALCOHOL CORPORATION

420 Lexington Avenue, New York, N. Y.

Successor to

*The American Distilling Co. Pekin, Illinois

David Berg Industrial Alcohol Co. Philadelphia, Pennsylvania

S .M. Mayer Alcohol Co, Inc. Gretna, Louisiana

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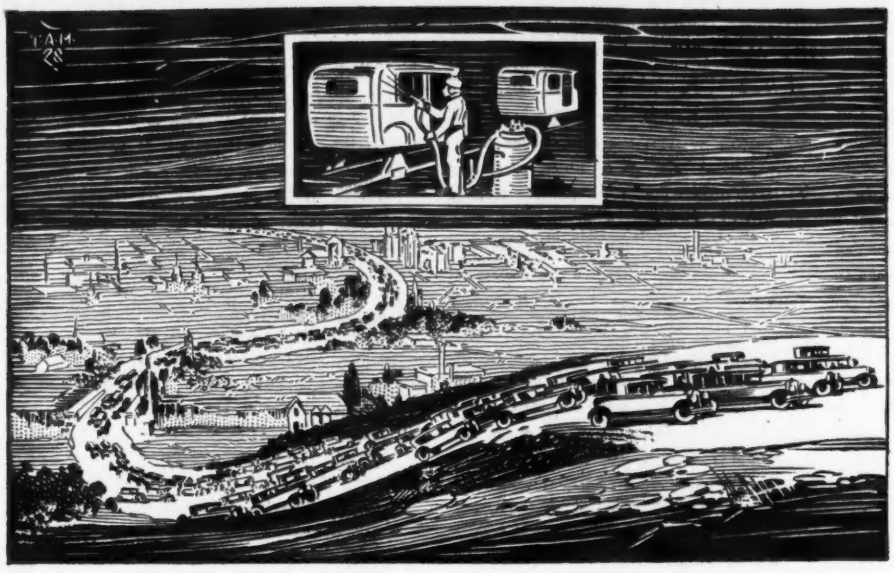
GUM, DAMMAR—500 cs, L C Gillespie & Sons, Greystroke Castle, Batavia
850 cs, Paterson, Boardman & Knapp, Greystroke Castle, Batavia
250 bgs, Paterson, Boardman & Knapp, Greystroke Castle, Batavia
100 cs, S Winterbourne & Co, Greystroke Castle, Batavia
25 cs, L Littlejohn & Co, Greystroke Castle, Singapore
200 cs, Innes & Co, Blommersdijk, Padang
150 cs, S Winterbourne & Co, Blommersdijk, Batavia
GHATTI—60 bgs, Orbis Products Trading Co, West Loquassuck, Bombay
KARAYA — 127 bgs, consignee to follow, Yorck, Bremen
70 bgs, Orbis Products Trading Co, West Loquassuck, Bombay
KAURI—58 cs, L C Gillespie & Sons, Tekoa, Auckland
50 cs, G W S Patterson Co, Tekoa, Auckland
246 cs, A Klipstein & Co, Tekoa, Auckland
94 bgs, A Klipstein & Co, Tekoa, Auckland
320 bgs, Stroock & Wittenberg, Tekoa, Auckland
36 bgs, National Bank of Com, Tekoa, Auckland
12 cs, National Bank of Com, Tekoa, Auckland
16 cs, J D Lewis, Canadian Highlander, Auckland
45 cs, J Meyer & Son, Canadian Highlander, Auckland
55 cs, Paterson, Boardman & Knapp, Canadian Highlander, Auckland
135 bgs, S Winterbourne & Co, Canadian Highlander, Auckland
35 bgs, G W S Patterson & Co, Canadian Highlander, Auckland
115 cs, G W S Patterson & Co, Canadian Highlander, Auckland
25 cs, A Klipstein & Co, Canadian Highlander, Auckland
169 bgs, A Klipstein & Co, Canadian Highlander, Auckland
160 bgs, L C Gillespie & Sons, Canadian Highlander, Auckland
53 cs, L C Gillespie & Sons, Canadian Highlander, Auckland
160 bgs, Stroock & Wittenberg, Canadian Highlander, Auckland
71 cs, Stroock & Wittenberg, Canadian Highlander, Auckland
LABDANUM—1 cs, A Chiris Co, Helen, Grasse
MASTIC—10 cs, 1,650 lbs, G H Lincks, Edison, Mitylene
OLIBANUM—130 bgs, Peek & Velsor, Inc, West Loquassuck, Bombay
20 cs, S B Penick & Co, Inc, West Loquassuck, Bombay
112 bgs, McKesson & Robbins, Jalapa, Bombay
132 bgs, S B Penick & Co, Inc, Jalapa, Bombay
29 cs, Comstock & Theakston, Jalapa, Bombay
SHIRAZ—372 bgs, Wm Mohrman, West Loquassuck, Bombay
TRAGACANTH—53 bgs, Lo Curto & Funk, Minnesota, London
78 bgs, G V Smith & Co, Jalapa, Bombay
GYPSUM—40 cks, 2 tons, 5 cwt, W H Kemp & Co, Samaria, Liverpool
310 bgs, Stanley Doggett, Inc, George Washington, Bremen
HAIR, HORSE—44 cs, Bertolino & Co, Havana, Taku Bar
5 cs, Block Bros, Minnesota, London
HERBS, MEDICINAL—21 bls, Parke, Davis & Co, Tergestea, Trieste
21 bls, S B Penick & Co, Inc, Tergestea, Trieste
5 bgs, 182 lbs, S B Penick & Co, Inc, New York, Hamburg
2 bls, 250 lbs, S B Penick & Co, New York, Hamburg
96 bls, 11,094 lbs, S B Penick & Co, Inc, Cabo Espartel, Malaga
1 bls, Wm Benkert & Co, Tergestea, Trieste
8 bgs, 1,126 lbs, S B Penick & Co, Inc, Cabo Espartel, Barcelona
INDIGO—5 cks, General Dyestuff Corp, Anaconda, Rotterdam
INTERMEDIATES — 8 cks, General Dyestuff Corp, Ryndam, Rotterdam
58 cks, General Dyestuff Corp, Anaconda, Rotterdam
IRON ORE—20,320 tons, Bethlehem Chile Iron Mines Co, Amerikaland, Cruz Grande
1,000 bgs, 110,000 lbs, Smith Chemical & Color Co, Helen, Malaga
OXIDE—25 cks, 6 tons, 13 cwt, 4 lbs, J Lee Smith & Co, Samaria, Liverpool
72 bbls, 39,600 lbs, Reichard-Coulston, Inc, Helen, Malaga
180 bbls, 99,000 lbs, C J Osborn & Co, Helen, Malaga
12 cks, 7,200 lbs, J A McNulty, Inc, Baltic, Liverpool
104 cks, 62,400 lbs, Reichard-Coulston, Inc, Baltic, Liverpool
20 bbls, 11,550 lbs, C B Chrystal Co, Inc, Cabo Espartel, Malaga
40 bbls, 22,000 lbs, Whittaker, Clark & Daniels, Cabo Espartel, Malaga
40 bbls, 22,000 lbs, J Lee Smith & Co, Cabo Espartel, Malaga
94 bbls, 57,200 lbs, C K Williams & Co, Cabo Espartel, Malaga
ISINGLASS—2 cs, C H Reisig, Carmania, London
LANOLIN—2 cks, 928 lbs, Burroughs, Welcome & Co, American Farmer, London
LEAVES, BUCHU—30 bls, S B Penick & Co, Inc, Western Knight, Cape Town
25 bls, Brown Bros & Co, Western Knight, Cape Town
LAUREL—111 bgs, 11,000 lbs, consignee to follow, Cabo Espartel, Marseilles
84 bls, 11,266 lbs, Van Loan & Co, Cabo Espartel, Marseilles
MEDICINAL—19 bls, 4,400 lbs, S B Penick & Co, Inc, Cabo Espartel, Marseilles
PATCHOULI—198 bls, Blommersdijk, Penang
SENNA—100 bls, 32,780 lbs, American Shipping Co, West Honaker, Suez
9 bls, 3,344 lbs, King & Howe, West Honaker, Suez
100 bls, American Shipping Co, Jalapa, Suez
LIME NITRATE—30 bgs, Kuttroff, Pickhardt & Co, Stavangerfjord, Oslo
LIME JUICE—100 cs, Evans Sons, Leecher & Webb, Ltd, Baltic, Liverpool
CONCENTRATED—10 cks, Gillespie & Co, Mayari, Kingston
LITHOPONE—50 cks, 27,500 lbs, African Metal Co, Lapland, Antwerp
100 cks, 55,000 lbs, Benj Moore & Co, Ryndam, Rotterdam
MACE — 10 bbls, Barclay Bank, Mayaro, Grenada
14 bbls, Knickerbocker Mills Co, Mayaro, Grenada
5 bgs, Royal Bank of Canada
30 cs, Knickerbocker Mills Co, Blommersdijk, Padang
37 cs, Catz American Co, Blommersdijk, Samarang
MAGNESIA, CALCINED — 50 cs, 5,600 lbs, Schofield-Donald Co, Scythia, Liverpool
CARBONATE—60 cs, 4,842 lbs, Lo Curto & Funk, Cabo Espartel, Genoa
CHLORIDE—5 cs, 495 lbs, J H Rhodes & Co, New York, Hamburg
MANGANESE FERRO—150 cs, De Courcey Brown, Cabo Espartel, Genoa
ORE—1,922 bgs, Brown & Roese, Miraflores, Pt Antonio
100 bgs, Hans Hinrichs Chem Corpn, San Juan, Ponce
MANNITE—6 bbls, Perry Ryer & Co, Alberto, Palermo
METHYL ANTHRANILATE—8 cs, 319 lbs, Geo Lueders & Co, New York, Hamburg
MYROBALANS—600 pockets, 18 tons, 12 cwt, Hammond & Carpenter, West Honaker, Calcutta
2,583 pockets, 74 tons, 15 cwt, 1 qr, The Tannin Corpn, West Honaker, Calcutta
NAPHTHALENE—1,000 bgs, 220,000 lbs, The White Tar Co, Saco, Antwerp
NICKEL SULPHATE—80 cks, Gallagher & Ascher, Rochambeau, Havre
NUTMEG—75 bgs, Jaeger & Co, Greystoke Castle, Singapore
20 bgs, Barclay Bank, Mayaro, Grenada
63 bgs, Royal Bank of Canada, Mayaro, Grenada
25 bgs, Middleton & Co, Mayaro, Grenada
OCHER, POWDERED—400 cks, Reichard-Coulston, Inc, Hellen, Marseilles
23 bbls, Hummel & Robinson Corpn, Hellen, Alicante
12 bbls, C B Chrystal Co, Inc, Cabo Espartel, Marseilles
YELLOW—13 cks, C J Osborn & Co, Scythia, Liverpool
OILCAKE, COD LIVER—10 bbls, Varlacoid Chem Co, Nerissa, St John's
OIL, ALMOND, SWEET—12 cs, 2,518 lbs, Ungerer & Co, American Farmer, London
2 dms, Fritzsche Bros, Muenchen, Bremen
ANISE—5 dms, P R Dreyer, Greystoke Castle, Hongkong
BAY—10 cs, D S Beasley & Co, San Juan, Arroyo
CAMPHOR WHITE—200 dms, Dodge & Olcott Co, Havana, Kobe
CANANGA—1 dm, C G Euler, Greystoke Castle, Batavia
CHINAWOOD—6,216 piculs, Spencer Kellogg & Sons, Greystoke Castle, Hankow
CITRONELLA—6 dms, 6,000 lbs, E L Prior & Co, Blommersdyk, Batavia
11 dms, 11,000 lbs, Sino Java Handel, Inc, Blommersdijk, Batavia
2 dms, 2,000 lbs, Palmolive Co, Blommersdijk, Batavia
COCONUT—1,549,516 lbs, Procter & Gamble Co, Greystoke Castle, Manila
COD—11 bbls, 550 gls, Varlacoid Chem Co, Nerissa, St John's
5 cks, 250 gls, Varlacoid Chem Co, Nerissa, St John's
300 cks, 15,000 gls, National Oil Products Co, Nerissa, St John's
CODLIVER—100 bbls, 3,000 gls, McKesson & Robbins, Stavangerfjord, Oslo
100 bbls, 3,000 gls, S B Penick & Co, Inc, Stavangerfjord, Oslo
ESSENTIAL—Best & Co, Aquitania, Southampton
2 cs, J Victori Co, Havana, Havana
5 cs, Heine & Co, Republic, Bremen
30 cs, D Orday Perf Co, France, Havre
9 cs, Orbis Products Trading Co, France, Havre
5 cs, Norda Essential Oil & Chem Co, France, Havre
3 cs, B French, Inc, France, Havre
1 cs, N J Byrnes, France, Havre
6 pkgs, Lo Curto & Funk, France, Havre
1 cs, American Express Co, France, Havre
3 cs, Geo Silver Import Co, France, Havre
7 cs, Guerlain, Inc, France, Havre
25 cs, Coty, Inc, France, Havre
9 cs, C W Sellers, France, Havre
2 cs, Deolay, Inc, France, Havre
12 cs, J E Bernard & Co, France, Havre
4 cs, Bertrand Freres, France, Havre
10 cs, A Bourjois & Co, France, Havre
2 cs, Maurice Levy, France, Havre
5 pkgs, Bank of United States, France, Havre
13 cs, Brown Bros & Co, France, Havre
2 cs, Dodge & Olcott Co, France, Havre
1 cs, Colgate & Co, Ryndam, Rotterdam
6 cs, Polaks Frutal Works, Ryndam, Rotterdam
12 cs, A Chiris Co, Helen, Grasse
2 dms, P R Dreyer, Helen, Malaga
2 cs, Globe Shipping Co, Rochambeau, Havre
1 cs, Maurice Levy, Rochambeau, Havre
3 cs, Morana & Co, Muenchen, Bremen
21 cs, Fritzsche Bros, Muenchen, Bremen
6 cs, Thomas & Pierson, Sarcoxie, Havre
3 cs, Nicht & Daniels, New York, Hamburg
6 cs, Lehn & Fink, Inc, Cabo Espartel, Marseilles
HAARLEM—10 cs, Kronfeld, Saunders & Co, Ryndam, Rotterdam
LAVENDER—3 cks, Guaranty Trust Co, Helen, Alicante
LEMON—1 dm, Lo Curto & Funk, New York, Hamburg
LUBRICATING—115 dms, Schlieman Co, New York, Hamburg
OLIVE—100 cs, 1,000 gls, Guardian Trust Co, Augustus, Genoa
550 cs, 5,500 gls, Bank of America, Augustus, Genoa
300 cs, 3,000 gls, Bank di Roma, Augustus, Genoa
56 cs, 560 gls, Rocco Cauccia, Augustus, Naples
26 cs, 260 gls, General Transport Co, Augustus, Naples
25 bbls, 1,250 gls, Austin Nichols & Co, Hellen, Marseilles
25 pkgs, Bank of America, Helen, Barcelona
50 tons, Banca Com Italia Trust Co, Helen, Tarragona
400 cs, 4,000 gls, Atlantic Nav Corp, Helen, Malaga
50 dms, Guaranty Trust Co, Helen, Malaga
25 dms, American Exchange Irving Trust Co, Helen, Malaga
115 dms, Brown Bros & Co, Helen, Malaga
50 dms, H W Peabody & Co, Helen, Malaga
50 dms, Bank of America, Helen, Malaga
100 cs, 1,000 gls, Lehn & Fink, Inc, Livenza, Genoa
1,010 cs, 10,100 gls, F Romeo & Co, Livenza, Leghorn
750 cs, 7,500 gls, Various Consignees, Livenza, Leghorn
72 cs, 720 gls, Bank of America, Cabo Espartel, Leghorn
25 cs, 250 gls, Austin Nichols & Co, Cabo Espartel, Leghorn
10 bbls, 500 gls, Castle & Overton, Cabo Espartel, Leghorn
450 cs, 4,500 gls, J P Smith & Co, Cabo Espartel, Marseilles
245 dms, Bank of America, Cabo Espartel, Malaga
100 cs, 1,000 gls, Banco di Sicilia Trust Co, Cabo Espartel, Malaga
250 cs, 2,500 gls, F Romeo & Co, Cabo Espartel, Malaga
25 dms, National Shawmut Bank, Cabo Espartel, Malaga
200 dms, National City Bank, Cabo Espartel, Malaga
25 cs, Madison State Bank, Cabo Espartel, Malaga
25 dms, Banco di Sicilia Trust Co, Cabo Espartel, Malaga
50 dms, D Spiliades & Co, Cabo Espartel, Malaga
100 cs, 1,000 gls, Bank of America, Liberty Land, Genoa
100 cs, 1,000 gls, L Gandolfi & Co, Liberty Land, Genoa
OIL, OLIVE—1,000 cs, 10,000 gls, F Romeo & Co, Liberty Land, Leghorn
PALM—40 cks, D Bacon, Scythia, Liverpool
79 cks, African & Eastern Trading Corp, New York, Hamburg
81 cks, D Bacon, Baltic, Liverpool
235 dms, The Niger Co, West Nohno, Port Harcourt
485 dms, African & Eastern Trading Corp, West Nohno, Calabar
624 tons, African & Eastern Trading Corp, West Nohno, Calabar
40 cks, The Niger Co, West Nohno, Abonenia
143 dms, Soc Comi De L Quest, West Nohno, Kotonou
310 bbls, Van Leemwein, Boomkamp & Co, Blommersdijk, Belawan Deli
890 bbls, Stein, Hirsh & Co, Blommersdijk, Belawan Deli
556,020 kilos, 1,223,244 lbs, The Niger Co, Blommersdijk, Belawan Deli
PALM KERNEL—579,120 kilos, 1,274,064 lbs, New York, Hamburg
PEANUT—334 tons, J Bibby & Son, Baltic, Liverpool
PERILLA—200 dms, Mitsui & Co, Havana, Kobe
PERSIC—3 dms, 1,953 lbs, Ungerer & Co, American Farmer, London
RAPESEED—50 dms, Mitsui & Co, Havana, Osaka
50 dms, Mitsui & Co, Havana, Kobe
ROSE—11 pots, Norda Essential Oil & Chem Co, Bombay, West Loquassuck
SESAME—100 dms, Contadina Oil Co, Ryndam, Rotterdam
SOYA BEAN—676 tons, Mitsubishi Shoji Kaisha, Havana, Dairen
SPERM—20 bbls, Robt Badcock & Co, Caledonia, Glasgow
SULPHUR—300 bbls, 15,000 gls, H W Peabody & Co, Edison, Canes
450 bbls, 22,500 gls, J B Dewsnop & Co, Edison, Canes
100 dms, H W Peabody & Co, Edison, Piraeus
200 bbls, 10,000 gls, H W Peabody & Co, Edison, Piraeus
100 bbls, 5,000 gls, H W Peabody & Co, Edison, Piraeus
100 bbls, 5,000 gls, Smith, Weilman Oil Co, Helen, Marseilles
100 bbls, 5,000 gls, H W Peabody & Co, Blommersdijk, Algiers
100 dms, H W Peabody & Co, Sinaia, Piraeus
200 dms, Bank of Athens, Sinaia, Piraeus
250 bbls, Smith, Weilman Oil Co, Edison, Piraeus
200 bbls, H W Peabody & Co, Edison, Piraeus
VARNISH—14 cs, Hanover National Bank, New York, Hamburg
YLANG YLANG—8 dms, George Lueders & Co, Liberty Lands, Marseilles
25 cs, H Schoenfeld & Son, Cabo Espartel, Alicante
25 bgs, H Schoenfeld & Son, Cabo Espartel, Alicante
25 bgs, D Kleckner, Cabo Espartel, Alicante
25 cs, D Kleckner, Cabo Espartel, Alicante
100 bgs, Rene Moelhausen, Cabo Espartel, Alicante
PAPRIKA—50 bgs, Knickerbocker Mills Co, Helen, Alicante
100 bgs, Caragol, Young & Co, Helen, Alicante
25 bgs, I Spitzer, Helen, Alicante
25 cs, I Spitzer, Helen, Alicante
109 bgs, B H Old & Co, Jalapa, Bombay
308 bgs, J W Phyfe & Co, Blommersdijk(Penang
240 bgs, Catz American Co, Blommersdijk, Telok Betong
399 bgs, E L Prior & Co, Minnesota, London
PEPPER, BLACK—1,101 bgs, Standard Bank South Africa, Carmania, London
400 bgs, W A Harriman & Co, Carmania, London
800 bgs, National City Bank, Carmania, London
250 bgs, Nassau Natl Bank, Greystroke Castle, Batavia
167 bgs, H P Winter & Co, Greystroke Castle, Batavia
165 bgs, E L Prior & Co, Greystroke Castle, Batavia
500 bgs, New York Trust Co, Greystroke Castle, Telok Betong
250 bgs, Van Loan & Co, Greystroke Castle, Telok Betong
3,400 bgs, H P Winter & Co, American Farmer, London
400 bgs, H P Winter & Co, American Farmer, London
WHITE—10 bgs, J W Phyfe & Co, Carmania, London
PETROLEUM, CRUDE—27,300 bbls, 1,146,600 gls, Gulf Refg Co, Catatumbo, Las Piedras
74,453 bbls, 3,127,026 gls, Pan-American Petroleum Corpn, Harold Walker, Aruba
68,000 bbls, 2,856,000 gls, Standard Oil Co, Durango, Tampico
90,553 bbls, 3,803,226 gls, Pan-American Petroleum Corpn, Cerro Azul, Aruba
45,320 bbls, 1,903,440 gls, Asiatic Petroleum Co, El Oso, Curacao
52,938 bbls, 2,223,396 gls, Asiatic Petroleum Co, Litiopa, Curacao
79,000 bbls, 3,318,000 gls, Standard Oil Co, Dillwyn, Mamonal
PIMENTO—250 bgs, 35,000 lbs, A S Lascelles & Co, Martinique, Kingston
100 bgs, 14,000 lbs, J E Kerr & Co, Mayari, Kingston
450 bgs, 63,000 lbs, Barclay Bank, Mayari, Kingston
PLASTER—6,000 tons, United States Gypsum Co, Gypsum Queen, Windsor
2,240 tons, Newark Plaster Co, Anders, Hillsborough
2,300 tons, Atlantic Gypsum Prod Co, Solhavn, Walton
500 bgs, Whittaker, Clark & Daniels, Muenchen, Bremen
5,400 tins, United States Gypsum Co, Gypsum Prince, Windsor
5,000 tons, United States Gypsum Co, Gypsum King, Windsor
POTASH CARBONATE—24 cks, 23,350 lbs, I M Sobin, Anaconda, Rotterdam
CAUSTIC — 50 dms, 34,676 lbs, Th Goldschmidt Corpn, Republic, Bremen
296 dms, Innis, Speiden & Co, Muenchen, Bremen
CHLORATE—300 bbls, 37,580 lbs, E Suter & Co, Sarcoxie, Havre
MANURE SALT—818,500 kilos, 1,800,700 lbs, N V Potash Export My, Grangesberg, Antwerp
MURIATE—1,750 bgs, N V Potash Export My, New York, Hamburg
9,977,880 kilos, 21,951,336 lbs, N V Potash Export My, Grangesberg, Antwerp
10,900 bgs, N V Potash Export My, Grangesberg, Antwerp
NITRATE—645 bgs, Kuttroff, Pickardt & Co, Anaconda, Rotterdam
13 cks, Kuttroff, Pickhardt & Co, Anaconda, Rotterdam
SALT—2 cs, Mager Bros, Inc, Carmania, London
10 cs, Mager Bros, Inc, Carmania, London
SULPHATE—760 bgs, N V Potash Export My, New York, Hamburg
PROTECTOL—55 cks, General Dyestuff Corpn, New York, Hamburg
PUMICE, LUMP—200 bgs, 22,629 lbs, C B Chrystal Co, Tergestea, Carmeto
12,459 bgs, National Pumice Stone Co, Tergestea, Carmeto
618 bgs, 74,800 lbs, K F Griffiths & Co, Inc, Tergestea, Carmeto
1,559 bgs, 132,000 lbs, J H Rhodes & Co, Liberty Land, Carmeto
POWDERED — 343 bgs, 75,372 lbs, C B Chrystal & Co, Tergestea, Carmeto
250 bgs, National Pumice Stone Co, Tergestea, Carmeto
25 bgs, 5,500 lbs, J H Rhodes & Co, Liberty Land, Carmeto
PYRITES—6,454,780 kilos, 14,200,516 lbs, The Pyrites Co, Lenfield, Huelva
QUEBRACHO EXTRACT — 63,840 lbs, The Tannin Corpn, Southern Cross, Buenos Aires
532 bgs, 1,868,640 lbs, International Prod Co, Southern Cross, Buenos Aires
519 bgs, 62,280 lbs, Corn Exchange Bank, Phidias, Buenos Aires
QUICKSILVER—31 flasks, Raul Bailleres, Havana, Vera Cruz
500 flasks, 44,000 lbs, R F Downing Co, Cabo Espartel, Alicante
QUINENE PRODUCTS—52 cs, R W Greef & Co, Ryndam, Rotterdam
SULPHATE—36 cs, R W Greef & Co, Ryndam, Rotterdam
ROOT, GINGER—50 bgs, Royal Ban of Canada, Mayari, Kingston
IPECAC—16 bgs, Lawrence Turnure & Co, Martinique, Cartagena
1 bg, Ultramares Corpn, Zacapa, Cartagena
ORRIS—100 bgs, 11,000 lbs, King & Howe, Cabo Espartel, Leghorn
SARSAPARILLA—5 bls, Eggers & Heinlein, Guayamapa, Puerto Cortez
SANDALWOOD—953 bgs, J H Faunce & Co, West Loquassuck, Bombay
SEED, ANISE—50 bgs, 5,500 lbs, Knickerbocker Mills Co, Cabo Espartel, Malaga
50 bgs, 5,500 lbs, Peek & Velsor, Inc, Cabo Espartel, Malaga
30 bgs, J Carauna, Hellen, Tarragona
CANARY—300 bgs, A G Dunn, Primero, Buenos Aires
CARAWAY—100 bgs, 11,000 lbs, C M V Sillevoidt, Ryndam, Rotterdam
100 bgs, 11,000 lbs, N C Littauer, Ryndam, Rotterdam
100 bgs, 11,000 lbs, French Kreme Co, Ryndam, Rotterdam
200 bgs, 22,000 lbs, I H E C of N Y, Ryndam, Rotterdam
CELERY—200 bgs, 44,000 lbs, Lo Curto & Funk, Cabo Espartel, Marseilles
22 bgs, 4,650 lbs, Archibald & Lewis Co, Cabo Espartel, Marseilles
DILL—355 bgs, E E Marks & Co, West Loquassuck, Bombay
444 bgs, Friedman & Slater, Jalapa, Bombay
MEDICINAL — 8 bgs, 1,067 lbs, Meht & Daniels, New York, Hamburg
13 bgs, 2,310 lbs, S B Penick & Co, Inc, Cabo Espartel, Marseilles
MUSTARD—150 bgs, I H E C of N Y, Ryndam, Rotterdam
200 bgs, B H Old & Co, West Loquassuck, Bombay
POPPY—200 bgs, 22,000 lbs, R L Friedler, Ryndam, Rotterdam
350 bgs, 38,500 lbs, Reynold Com Co, Ryndam, Rotterdam
150 bgs, 16,500 lbs, L Littlejohn & Co, Ryndam, Rotterdam
200 bgs, 22,000 lbs, C M V Sillieboldt, Ryndam, Rotterdam
QUINCE—5 bgs, F W Mead & Co, Jalapa, Bombay
7 bgs, King & Howe, Jalapa, Bombay
RAPE—150 bgs, Doughton Seed Co, Ryndam, Rotterdam
SUNFLOWER—260 bgs, A G Dunn, Primero, Buenos Aires
SHELLAC—100 bgs, Carleton & Moffat, West Honaker, Calcutta
25 bgs, Everett, Carleton & Co, New York, Hamburg
170 bgs, Ralli Bros, New York, Hamburg
SIENNA—50 cks, 21,846 lbs, J Lee Smith & Co, Livenza, Leghorn
46 cks, 27,075 lbs, Reichard-Coulston, Inc, Cabo Espartel, Leghorn
SOAP—55 cs, Lekas & Drivas, Edison, Mitylene
25 cs, National City Bank, France, Havre
11 cs, F R Arnold & Co, France, Havre
12 pkgs, Globe Shipping Co, Rochambeau, Havre
1,550 cs, 61,747 lbs, Soap Distributors, Inc, Liberty Land, Leghorn
LIQUID—21 cs, W Braat, Ryndam, Rotterdam
SODA—100 bbls, Innes, Speiden & Co, Ryndam, Rotterdam
ACETATE—127 dms, 73,761 lbs, Grasselli Dyestuff Corpn, Anaconda, Rotterdam
CYANIDE—332 cans, Charles Hardy, Inc, Rochambeau, Havre
HYDROSULPHITE—75 dms, 23,925 lbs, American Exchange-Irving Trust Co, New York, Hamburg
NITRATE—411 bgs, Kuttroff, Pickhardt & Co, Stavangerfjord, Oslo
13,381 bgs, Wessel, Duval & Co, Aconcagua, Valparaiso
5,049 bgs, H J Baker & Bro, Aconcagua, Valparaiso
227 bgs, Kuttroff, Pickhardt & Co, New York, Hamburg
PHOSPHATE—172 cks, 60,165 lbs, Rhodia Chem Co, Anaconda, Rotterdam
334 cks, 120,507 lbs, Roessler & Hasslacher Chem Co, Saco, Antwerp
PRUSSIATE YELLOW—30 cks, A Klipstein & Co, Ryndam, Rotterdam
SILICO FLUORIDE — 46 dms, 34,293 lbs, Harshaw, Fuller & Goodwin, Anaconda, Rotterdam
URANATE—35 bbls, Belgo American Trading Corpn, Caucasier, Antwerp
SULPHATE—300 cks, 141,900 lbs, Kuttroff, Pickhardt & Co, Anaconda, Rotterdam
SULPHIDE—19 dms, Kuttroff, Pickhardt & Co, Ryndam, Rotterdam
SPONGES—153 bls, 15,300 lbs, Atlas Sponge Co, Siboney, Havana
233 bls, 23,300 lbs, Lasker & Bernstein, Siboney, Havana
74 bls, 7,400 lbs, Gulf & West Indies Sponge Co, Siboney, Havana
107 bls, 10,700 lbs, Florida Sponge Co, Siboney, Havana
25 bls, 2,500 lbs, American Sponge Co, Munamar, Nassau
107 bls, 10,700 lbs, Lasker & Bernstein, Munamar, Nassau
72 bls, 7,200 lbs, J H Rhodes & Co, Munamar, Nassau
5 bls, 500 lbs, Albert Block & Son, Munamar, Nassau
SQUILLS—20 bls, Allaire Woodward & Co, Alberta, Catania
STARCH, POTATO—500 bgs, 115,000 lbs, Mitsui & Co, Ryndam, Rotterdam
20 bgs, 4,600 lbs, Heemsoth & Basse, Ryndam, Rotterdam
50 bgs, 11,500 lbs, J Wertheimer & Son, Ryndam, Rotterdam
500 bgs, 115,000 lbs, Jos Morningstar & Co, Frederick VIII, Oslo
SUMAC—1,050 bgs, A Klipstein & Co, Alberta, Palermo

Current Prices are now printed in connection with the Market Reports. See index, page 2.

ALCOHOL THROUGH THE AGES NUMBER XXIV



AMBASSADORS OF UNDERSTANDING

A quarter century has seen barriers of distance broken down, sectional misunderstandings eliminated, the vision of a people broadened, and civilization advanced beyond all former conceptions. The motor car, monarch of the miles, untiring steed of the modern day, has worked wonders in unifying the thoughts and actions of the world.

Twenty-two million automobiles in use in the United States puts our nation on wheels; a production of four million cars a year places the automotive industry in the forefront—and Industrial Alcohol helps to keep it there.

The brilliant, lustrous lacquers, paints and varnishes, which combine beauty and durable protection, are largely dependent upon Alcohol as a solvent, while the use of the motor car in cold climates has been extended to year around operation because Alcohol is universally used as an anti-freeze.

* * * *

Millions of gallons of Solox Denatured Alcohol—"Anty Freez"—are sold by the Kentucky Alcohol Corporation every year to protect the radiators of the nation, while other enormous quantities find their way from our distilleries to shellac, lacquer, and varnish manufacturing plants.

KENTUCKY ALCOHOL CORPORATION

30 BROAD STREET * * * NEW YORK CITY

Address Sales Representatives Below for Your Industrial Alcohol Needs:

ALBANY, N. Y.
North Hudson Chemical Co.
BALTIMORE, MD.
Wm. McGill
BOSTON, MASS.
H. T. West Co.
CHICAGO, ILL.
DeMert and Dougherty
CINCINNATI, OHIO
C. M. Durbin Co., Pickering Bldg.
CLEVELAND, OHIO
E. R. Smead Co.
COLUMBUS, OHIO
Gittins-Gwinn Co.
DALLAS, TEXAS
Crimmins Sales Organization
DETROIT, MICH.
Terminal Sales Corporation
Wyoming and Brandt Avenues
GRAND RAPIDS, MICH.
Furniture Mfrs. Whse. Co.
INDIANAPOLIS, IND.
Indiana Naval Stores Co.
KANSAS CITY, MO.
John T. Kennedy Sales Co
LOUISVILLE, KY.
John Thixton
MEMPHIS, TENN.
L. E. Offutt
MINNEAPOLIS, MINN.
Western Oil and Fuel Co.
NEWARK, N. J.
National Oil & Supply Co.
OMAHA, NEB.
Kohn Bros. Brokerage Co.
PHILADELPHIA, PA.
Merrill Sales Corp.
PITTSBURGH, PA.
Blackman-Tench Co.
ST. LOUIS, MO.
DeMert & Dougherty, 78 Dock St.
TOLEDO, OHIO
General Brokerage Corp.

TALC—200 bgs, 44,000 lbs, Charles Mathieu, Augustus, Genoa
200 bgs, 44,000 lbs, Charles Mathieu, Livenza, Genoa
200 bgs, 44,000 lbs, C B Chrystal Co, Inc, Livenza, Genoa
100 bgs, 22,000 lbs, L A Salomon & Bro, Livenza, Genoa
1,500 bgs, 310,970 lbs, Charles Mathieu, Cabo Espartel, Genoa
TANNING EXTRACT—363 bgs, 18 tons, 13 cwt, 4 lbs, The Tannin Corpn, Western Knight, Durban
TAPIOCA FLAKE—786 bgs, Stein, Hall Co, Blommersdijk, Sourabaya
FLOUR—1,513 bgs, National Gum & Mica Co, Greystoke Castle, Batavia
2,953 bgs, Stein, Hall & Co, Greystoke Castle, Batavia
288 bgs, Arabol Mfg Co, Greystoke Castle, Batavia
4,623 bgs, Stein, Hall & Co, Blommersdijk, Sourabaya
315 bgs, National Gum & Mica Co, Blommersdijk, Batavia
PEARL—614 bgs, Stein, Hall & Co, Blommersdijk, Sourabaya
TARTAR, CRUDE—586 bgs, Tartar Chem Works, Hellen, Marseilles
92 bgs, Chas Pfizer & Co, Hellen, Marseilles
267 bgs, Harshaw, Fuller & Goodwin Co, Hellen, Barcelona
169 bgs, Tartar Chem Works, Livenza, Naples
115 bgs, Tartar Chem Works, Cabo Espartel, Leghorn
116 bgs, Tartar Chem Works, Liberty Land, Leghorn
TEA WASTE—500 bgs, 15 tons, 10 cwt, Citro Chem Co, West Honaker, Calcutta
TURMERIC—60 bgs, King & Howe, Jalapa, Bombay
UREA—50 cks, 12,476 lbs, Kuttroff, Pickhardt Co, Anaconda, Rotterdam
VARNISH—2 cs, Kemp & Co, Rochambeau, Havre
WAX, BEES—36 pkgs, Smith & Nichols, Sarcoxie, Havre
17 jottas, Imperial Bank of Persia, Minnesotta, London
2 bgs, D Steengrafe, Tachira, San Juan
3 bgs, D Steengrafe, San Juan, Ponce
PARAFFIN—2,000 bgs, Asiatic Petroleum Co, Greystoke Castle, Balik Papan
5,600 bgs, Asiatic Petroleum Co, Minnesotta, London
VEGETABLE—21 bgs, Lange Bros & Co, Inc, Mayari, Cristobal
WHITING—900 bgs, A Klipstein & Co, Caucasier, Antwerp
42 bbls, National City Bank, Lapland, Antwerp
840 bgs, 92,400 lbs, Scott L Libby Corpn, Sarcoxie, Havre
900 bgs, 100,485 lbs, A Klipstein & Co, Saco, Antwerp
500 bgs, 55,000 lbs, C B Crystal Co, Inc, Saco, Antwerp
1,000 bgs, Smith Chem & Color Co, Saco, Antwerp
50 bbls, Smith Chem & Color Co, Saco, Antwerp
WOOD FLOUR—820 bgs, State Chem Co, Ryndam, Rotterdam
1,200 bgs, B L Soberski, Stavangerfjord, Oslo
ZINC AMMONIUM CHLORIDE—70 cks, Roessler & Hasslacher Chem Co, Lapland, Antwerp

Imports at New York in Transit

BEANS, COCOA—125 bgs, Mayaro, Trinidad, Auckland
280 bgs, Mayaro, Trinidad, Cape Town
200 bgs, Ulua, Port Limon, Marseilles
8 bgs, Ulua, Port Limon, London
BRONZE, POWDER—6 bbls, George Washington, Bremen, Rochester
COCONUT—280 bgs, 28,000 lbs, Mayari, Kingston, Liverpool
100 bgs, 10,000 lbs, Mayari, Kingston, London
COPRA—1,162 bgs, 151,060 lbs, Mayari, Kingston, Rotterdam
FLOWERS, SAFFRON—1 cs, 167 lbs, Cabo Espartel, Barcelona, Progreso
GELATIN—42 cs, Eastman Kodak Co, Ryndam, Rotterdam, Rochester
GLASS, WINDOW—2,229 cs, Eastman Kodak Co, Lapland, Antwerp, Rochester
GUM, KAURI—141 bgs, Tekoa, Auckland, London
98 pkgs, Tekoa, Auckland, London
20 cs, Tekoa, Auckland, London
63 bgs, National Bank of Commerce, Canadian Highlander, Auckland, Hamburg
9 cs, National Bank of Commerce, Canadian Highlander, Auckland, Hamburg
5 cs, Strook & Wittenberg, Canadian Highlander, Auckland, Hamburg
LOGWOOD EXTRACT—32 cks, Mayari, Kingston, Antwerp
OIL, OLIVE — 500 cs, 5,000 gls, Augustus, Genoa, Pittsburgh
250 cs, 2,500 gls, Livenza, Leghorn, Pittsburgh
150 cs, 1,500 gls, Liberty Land, Leghorn, New Haven
30 cs, 300 gls, Liberty Land, Leghorn, Chicago
PIMENTO—300 bgs, 70,000 lbs, Mayari, Kingston, Hamburg
100 bgs, 14,000 lbs, Mayari, Kingston, Havre
PITCH—18 cs, Moore & Munger, Lapland, Antwerp, Canada
ROOT, SARSAPARILLA—2 bls, Ulua, Cristobal, London
SEED, CANARY—1,279 bgs, Southern Cross, Buenos Aires, Vera Cruz
SPONGES—55 bls, 5,500 lbs, Siboney, Havana, London
5 bls, 500 lbs, American Sponge Co, Munamar, Nassau, Trieste
6 bls, 600 lbs, American Sponge Co, Munamar, Nassau, Hamburg
58 bls, 5,800 lbs, Royal Bank of Canada, Munamar, Nassau, France
8 bls, 800 lbs, Munamar, Nassau, Hamburg
14 bls, 1,400 lbs, C Badault, Munamar, Nassau, Havre
20 bls, 2,000 lbs, W Webar, Munamar, Nassau, Rotterdam
30 bls, 3,000 lbs, Lasker & Bernstein, Munamar, Nassau, Bremen
24 bls, 2,400 lbs, Royal Bank of Canada, Munamar, Nassau, Hamburg

Imports at Baltimore

ARSENIC, POWDERED—18 cks, 11,790 lbs, Innis, Speiden & Co, Eastern Dawn, Antwerp
BLEACHING POWDER—25 cs, 7,925 lbs, H Kohnstamm & Co, Inc, Bellflower, Liverpool
BONE MEAL—500 bgs, 111,650 lbs, Hollinghurst & Co, Inc, Eastern Dawn, Antwerp
PHOSPHATE, PRECIP—250 bgs, T Henry Schroeder Banking Co, Turpin, Hamburg
BONES—1,219,459 lbs, West Selene, Buenos Aires
CHEMICALS—450 bgs, Roessler & Hasslacher Chemical Co, Turpin, Bremen
CLAY—280 cks, 344,960 lbs, Natirar, Bremen
9 cks, 11,000 lbs, Baltimore & Ohio Railroad, Natirar, Bremen
FERTILIZER, WHALE MEAL—5,440 bgs, 554 tons, Bellflower, Liverpool
GLASS, PLATE—19 cs, 47,872 lbs, Maryland Glass Mirror Co, Eastern Dawn, Antwerp
GLAUBER'S SALT—197 bbls, 39,785 lbs, Natirar, Hamburg
GLUE—1,334 bgs, 554 tons, Bellflower, Liverpool
HOOF MEAL—800 bgs, 625½ tons, Bellflower, Liverpool
IRON ORE—11,000 tons, Bethlehem Steel Corpn, Feltore, Cruz Grande
OIL, PALM NUT—1 cs, 75 lbs, Equitable Trust Co, Saugus, Marseilles
SESAME—200 bls, 108,672 lbs, Equitable Trust Co, Saugus, Marseilles
PAPRIKA—700 bgs, 78,870 lbs, McCormick & Co, City of Eureka, Alicante
PETROLEUM, CRUDE—115,000 bbls, Standard Oil Co, Wm J Warden, Mamonal
65,000 bbls, Mexican Petroleum Corpn, Frederic Ewing, Tampico
POTASH—29 cks, 24,372 lbs, Brown Bros & Co, Natirar, Hamburg
CAUSTIC—90 dms, American Exchange-Irving Truet Co, Turpin, Hamburg
SEED, CANARY—100 bgs, 48,400 lbs, Saugus, Casa Blanca
SODA, CYANIDE—450 dms, Bellflower, Liverpool
NITRATE—24,000 bgs, 2,300 tons, Anglo-Chilean Nitrate Co, Eir, Tocopilla

Imports at Baton Rouge

PETROLEUM, CRUDE—50,000 bbls, Standard Oil Co., Pioneer, Tampico.

Imports at Boston

ALUM—160 cks, 33 tons, 16 cwt, 3 qrs, 6 lbs, Marble Nye Co, Francisco, Hull
BARIUM NITRATE—63 cks, 58,889 lbs, Irving M Sobin Co, Anaconda, Rotterdam
BARK—185 bdls, 31,879 lbs, Saleier, Macassar
BEANS, VANILLA—9 pkgs, City of Shanghai, Colombo
CHEMICALS—50 dms, 23,512 lbs, A Klipstein Co, Anaconda, Rotterdam
20 cks, 12,050 lbs, Roessler & Hasslacher Chemical Co, Anaconda, Rotterdam
80 balloons, 13,400 lbs, Roessler & Hasslacher Chemical Co, Anaconda, Rotterdam
100 cks, 59,300 lbs, Anaconda, Rotterdam
CLAY, CHINA—263 tons, 11 cwt, Moore & Munger, Holland, Fowey
1,919 tons, 1 cwt, English China Clays Sales Corpn, Holland, Fowey
655 cks, 327 tons, 10 cwt, English China Clays Sales Corpn, Holland, Fowey
POTTERS'—50 tons, Hammill & Gillespie, Inc, Holland, Fowey
FERROMANGANESE—50 tons, bulk, C W Leavitt Co, Francisco, Hull
50 tons, bulk, Brown Bros, Francisco, Hull
FERTILIZER, NITROGENOUS—570 bgs, 60,031 lbs, Synthetic Nitrogen Products Corp, Anaconda, Rotterdam
LEATHER MEAL—442 bgs, 88,502 lbs, Baker & Bros, Francisco, Antwerp
GLAUBER'S SALT—500 bgs, 110,230 lbs, Francisco, Antwerp
50 cks, 23,589 lbs, Philipp Bros, Anaconda, Rotterdam
GLUESTOCK, FISH BONES AND SKINS—75 bgs, Russia Cement Co, Prince George, Yarmouth
FISH HEADS—1 bbl, D Atwood, Prince George, Yarmouth
FISH SCRAP—2 bbls, Atwood & Co, Yarmouth, Yarmouth
1 bbl, J K Dennis, Yarmouth, Yarmouth
5 bbls, J P Field, Yarmouth, Yarmouth
3 bbls, J P Field, Prince George, Yarmouth
2 bbls, E A Malone, Prince George, Yarmouth
FISH SKINS—27 bgs, 4 bbls, Rogers Isinglass & Glue Co, Yarmouth, Yarmouth
GUM, GHATTI—56 bgs, T M Duche, City of Shanghai, Bombay
NUTMEGS—100 cs, 16,134 lbs, Saleier, Macassar
OCHER—30 cks, 17,390 lbs, Reichard Coulston, Inc, Luxpalile, Marseilles
60 cks, 37,335 lbs, J Lee Smith Co, Luxpalile, Marseilles
30 cks, 22,888 lbs, Luxpalile, Marseilles
OIL, COD—21 bbls, White & Hodges, Prince George, Yarmouth
200 bbls, 40 tons, 17 cwt, 1 qr, 9 lbs, J S Bent Co, Francisco, Hull
100 bbls, 20 tons, 7 cwt, 2 qrs, 1 lb, White & Hodges, Francisco, Hull
RAPESEED—125 dms, 26 tons, 5 cwt, 1 qr, 13 lbs, Francisco, Hull
30 dms, Quaker City, Hull
SULPHUR—100 bbls, 47,257 lbs, Luxpalile, Leghorn
PEPPER, BLACK—240 bgs, 330,901 lbs, Catz American Co, Blummerdijk, Telok Betong
PETROLEUM, CRUDE—74,961 bbls, Pan American Petroleum Corpn, I C White, Aruba
69,853 bbls, Pan American Petroleum Corpn, Meline, Aruba
PLANTS, DRIED—13 crts, 6 bls, 2,667 lbs, Francisco, Antwerp
PUMICE, POWD—200 double bgs, 44,092 lbs, Luxpalile, Lipari
SEED, CORIANDER—61 bgs, 6,858 lbs, Luxpalile, Marseilles
SHELLAC—100 bgs, E S Parks Shellac Co, Mahseer, Calcutta
BUTTONLAC—25 bgs, Rogers Pyatt Shellac Co, City of Shanghai, Calcutta
SEEDLAC—1,000 bgs, E S Parks Shellac Co, Mahseer, Calcutta
104 chests, Rogers Pyatt Shellac Co, Mahseer, Calcutta
SOAP—200 bxs, 8,175 lbs, Soap Distributors, Inc, Luxpalile, Leghorn
SODA, BISULPHITE—50 dms, 22,476 lbs, Francisco, Antwerp
NITRATE—15,698 bgs, Wessel, Duval & Co, Birk, Antofagasta
SULPHIDE—25 dms, 11,755 lbs, Irving M Sobin Co, Anaconda, Rotterdam
SPONGES—3 cs, President Adams, Genoa
TALC—150 bgs, 33,069 lbs, L A Salomon & Bros, Luxpalile, Genoa
TAPIOCA, FLAKE, SIFTINGS—68 bgs, 11,387 lbs, National City Bank, Blommersdijk, Sourabaya
FLOUR—250 bgs, Arnold Hoffman Co, Blommersdijk, Batavia
3,287 bgs, 680,516 lbs, National City Bank, Blommersdijk, Sourabaya
250 bgs, 56,074 lbs, Catz American Co, Blommersdijk, Batavia
747 bgs, 168,154 lbs, Goldman, Sachs Co, Saleier, Batavia
PEARL—587 bgs, 102,282 lbs, National City Bank, Blommersdijk, Sourabaya

Imports at Boston in Transit

CHEMICALS—250 bgs, 55,666 lbs, Roessler & Hasslacher Chemical Co, Anaconda, Rotterdam, for Hamilton, Ont
400 cks, 89,066 lbs, Roessler & Hasslacher Chemical Co, Anaconda, Rotterdam, for Cooksville, Ont
GLUE, FISH—10 cks, 2 tons, 9 cwt, 2 qrs, 13 lbs, McLaurin, Jones & Co, Francisco, Hull, for Brookfield
SOAP—30 cs, V de Messimy, President Adams, Marseilles, for Chicago
TAPIOCA, FLAKE, DUST—25 bgs, 4,482 lbs, National City Bank, Blommersdijk, Sourabaya, for Toronto
FLOUR—50 bgs, 10,369 lbs, National City Bank, Blommersdijk, Sourabaya, for Toronto
TAPIOCA, PEARL—184 bgs, 35,573 lbs, Canadian Bank of Commerce, Saleier, Tandjong Priok, for London, Canada
193 bgs, 34,008 lbs, National City Bank, Blommersdijk, Sourabaya, for Toronto
307 bgs, 54,441 lbs, National City Bank, Blommersdijk, Sourabaya, for Montreal
SEED—126 bgs, 22,764 lbs, National City Bank, Blommersdijk, Sourabaya, for Toronto
75 bgs, 13,598 lbs, National City Bank, Blommersdijk, Sourabaya, for Montreal
46 bgs, 8,888 lbs, Canadian Bank of Commerce, Saleier, Tandjong Priok, for London, Canada

Imports at Corpus Christi

PETROLECM, CRUDE.—15,000 bbls, Mexoil, Tampico

Imports at Fall River

OIL, FUEL—78,154 bbls, 3,282,488 gls, Asiatic Petroleum Co, Swiftarrow, Curacao

Imports at Galveston

SALT CAKE—205 tons, West Quechee, Hamburg
WITHERITE—310 tons, West Ekonk, Hull

Imports at Gloucester

OIL, COD—24 bbls, Frank C Pearce Co, Bambi, Tiverton
FISH—6½ bbls, Gorton Pew Fisheries Co, Louisa R Sylva, Grindston, Miq
OILCAKE, COD—41 bbls, Frank C Pearce Co, Bambi, Tiverton

Imports at Houston

POTASH, CAUSTIC—40 dms, West Quechee, Hamburg
KAINIT—400 bgs, West Quechee, Hamburg

Imports at Los Angeles

ACID, CRESYLIC—10 dms, 8,800 lbs, Braun Corp, Australien, Hamburg
STEARIC—25 bgs, 4,400 lbs, Western Wholesale Drug Co, Nicteroy, Rotterdam
BLEACHING POWDER—30 dms, 14,176 lbs, Meyer & Co, Australien, Frankfort
BONE MEAL—756 bgs, 66 tons, Pacific Guano & Fertilizer Co, Nicteroy, Frankfort
486 bgs, 48 tons, Pacific Guano & Fertilizer Co, Saale, Koln
GLASS, WINDOW—1,362 pkgs, 76,613 lbs, H B Mills Co, Texas, Brussels
1,561 cs, Eugene Ticho, Texas, Lille
IRON OXIDE—40 cks, 22,040 lbs, L H Butcher, Nicteroy, Malaga
LIME NITRATE—635 bgs, 220 tons, Meyer & Co, Australien, Berlin
OIL, CITRONELLA—5 dms, 5,568 lbs, L A Soap Co, Golden Dragon, Colombo
COCONUT—2,256,018 lbs, in bulk, L A Soap Co, Silveray, Manila
OLIVE — 50 dms, 20,341 lbs, Italian Food Product Co, Nicteroy, Seville
PALM—465 bbls, 173,151 lbs, Globe Grain & Mill Co, Silveroak, Medan
OILMEAL, COPRA — 1,500 sks, 150,000 lbs, Dairymen's Feed & Supply Co, Ibukisan, Yokohama
2,240 sks, 200,000 lbs, S F Mill Co, Golden Dragon, Manila
4,480 sks, 448,000 lbs, Dairymen's Feed & Supply Co, Silveray, Manila
2,000 bgs, 200,000 lbs, Atlas Mill Co, Silveray, Manila
LINSEED—1,000 bgs, 100,000 lbs, Nicholls Grain & Mill Co, Akagisan, Kobe
2,000 bgs, 200,000 lbs, S F Mill Co, Akigisan, Kobe
MANIOC—1,200 bgs, 226,400 lbs, Consolidated Mill Co, Silveroak, Surabaya
1,000 bgs, 200,000 lbs, Atlas Mill Co, Silveroak, Surabaya
4,858 bgs, 903,700 lbs, S F Mill Co, Silveray, Surabaya
318 bgs, 54,516 lbs, Consolidated Mill Co, Silveray, Surabaya
SOYA BEAN—2,000 sks, 200,000 lbs, Tarr & McComb, Ibukisan, Kobe
2,400 sks, 240,000 lbs, S F Mill Co, Ibukisan, Kobe
200 bgs, 20,000 lbs, Asia Co, Ibukisan, Kobe
2,000 bgs, 200,080 lbs, Poultrymen's Cop Assn, Golden Mountain, Dairen
SHELLAC—25 sks, 4,100 lbs, W H Peabody & Co, Silveray, Calcutta
WHITING—200 bgs, 44,000 lbs, Ellsworth Co, Texas, Hamburg

Imports at Mobile

AMMONIAC, SAL—100 cs, Nemaha, Rotterdam
OIL, FUEL—40,000 bbls, Pioneer, Baton Rouge

Imports at New Orleans

BAUXITE ORE—3,255 tons, Republic Mining & Mfg Co, Bretagne, Georgetown
2,344 tons, Republic Mining & Mfg Co, Rheinland, Georgetown
BEANS, VANILLA—2 cs, George W Rueff, Inc, Leerdam, Vera Cruz
BONE MEAL—200 bgs, Oakwood, Bremen
COCONUTS—39,984, Fruit Dispatch Co, Gansfjord, Belize
1,250 bgs, J Meyer, Inc, Gansfjord, Belize
5,300, Cuyamel Fruit Co, Rheinland, Georgetown
50 sx, Standard Fruit & Steamship Co, Virginia, Nicuesa
395 sx, Standard Fruit & Steamship Co, Tegucigalpa, Vera Cruz
KEROSENE—35,000 bbls, Mexican Petroleum Corpn, Charles E Harwood, Tampico
PETROLEUM, CRUDE—69,385 bbls, Pan American Petroleum Corpn, Montana, Aruba
30,000 bbls, Harry Farnum, Tampico
40,000 bbls, Mexican Petroleum Corpn, Norman Bridge, Tampico
ROOT, SARSAPARILLA—47 bgs, Leerdam, Vera Cruz

Imports at Norfolk

FERTILIZER, LEATHER SCRAP—205 bgs, New York Trust Co, Manchester Shipper, Manchester
4,951 bgs, 781 tons, New York Trust Co, Bellepline, Rotterdam
GLASS, PLATE—12 cs, Burgerdijk, Rotterdam
SEED, RUBBER—15 bls, Prosco Oils Corpn, Quaker City, Hull
UREA—1,031 bgs, 90 tons, Synthetic Nitrogen Products Corpn, Bellepline, Rotterdam

Imports at Philadelphia

ACID, FORMIC—50 carboys, R W Greeff & Co, Inc, Waaldijk, Rotterdam
AMMONIAC, SAL—100 cks, Waaldijk, Rotterdam
ANTIMONY SALT—100 bbls, Natirar, Rotterdam
ASBESTOS—1,053 bgs, Philip Carey Mfg Co, Western Knight, Capetown
BONES, CLUE—500 bgs, Hagen, Hamburg
CASEIN—417 bgs, Bank of London and South America, West Imboden, Buenos Aires
CHALK — 1,000 bgs, Coahoma County, Antwerp
CHEMICALS—25 carboys, Natirar, Hamburg
184 dms, Brown Bros & Co, Hagen, Hamburg
3,000 bgs, Hagen, Hamburg
25 cks, Hagen, Hamburg
20 dms, American Exchange-Irving Trust Co, Hagen, Hamburg
15 bbls, Hagen, Hamburg
25 bbls, Wm Schall & Co, Westfalen, Hamburg
CHROME ORE—627 tons, 15 cwt, 15 lbs, Brown Bros & Co, Western Knight, Lourenco Marques
CLAY—200 tons, United Clay Mines Corpn, New York City, Bristol
382 tons, Moore & Munger, New York City, Bristol
120 tons, New York City, Bristol
600 bgs, J L Vandiver Co, New York City, Bristol
CHINA—3,861 tons, 16 cwt, in bulk, Teespool, Fowey
240 bgs, C F Wilson & Co, New York City, Bristol
COMMON BLUE—396 tons, 10 cwt, Teespool, Fowey
POTTER'S RAW—175 tons, in bulk, Teespool, Fowey
90 cks, Natirar, Bremen
660,000 lbs, Westfalen, Bremen
COALTAR, DISTILLATE—77 dms, Tar Acid Refining Corpn, London Merchant, London
15 dms, Tar Acid Refining Corpn, Devonian, Liverpool
COBALT OXIDE—10 cs, Hagen, Hamburg
CORK—32 bls, Pennsylvania Trading Co, Alecos, Seville
BOARD—12,000 bxs, Pennsylvania Trading Co, Alecos, Seville
COMMON—3,080 bls, Pennsylvania Trading Co, Alecos, Seville
DISCS—21 bls, Pennsylvania Trading Co, Alecos, Seville
SHAVINGS—4,901 bls, Pennsylvania Trading Co, Alecos, Seville
SPLITS—38 bls, Pennsylvania Trading Co, Alecos, Seville
VIRGIN WASTE—420 bls, Pennsylvania Trading Co, Alecos, Seville
WOOD—3,856 bls, Pennsylvania Trading Co, Alecos, Seville
WOOD, CRUDE—1 crt, Pennsylvania Trading Co, Alecos, Seville
FERROMANGANESE—35 tons, Rogers, Brown & Co & Crocker Bros, London Merchant, London
FERTILIZERS NITROGENOUS—15 bgs, Wm J Jones & Co, London Merchant, Glasgow
FLUORSPAR—192 tons, 21 cwt, 3 qtrs, 36 lbs, Standard Bank of South Africa, Ltd, Western Knight, Durban
1,600 bgs, Livenza, Genoa
GLASS, PLATE — 23 cs, Coahoma County, Antwerp
14 cs, French-American Irving Trust Co, Coahoma County, Antwerp
SHEET—123 cs, John H Faunce Co, Coahoma County, Antwerp
WINDOW—1,252 cs, Coahoma County, Antwerp
59 cs, Simon, Bache & Co, Coahoma County, Antwerp
1 ck, London Merchant, London
GLAUBER'S SALT—126 bbls, Natirar, Hamburg
GLUE, HIDE—554 bgs, Hagen, Hamburg
GUM, BLEACHED—10 bgs, Malhar, Port Sudan
COPAL—223 baskets, Lancaster Castle, Macassar
IRON ORE—6,800 tons, Alan Wood Iron & Steel Co, Ra Azul, Benisaf
LACQUER—2 dms, Waaldijk, Rotterdam
LIME—200 bgs, New York City, Bristol
MAGNESITE, CALC—340 bbls, Brown Bros & Co, Waaldijk, Rotterdam
75 cks, C P National Bank & Trust Co, Waaldijk, Rotterdam
MANGANESE ORE—8,560 tons, Guaranty Trust Co, Karplinger, Poti
MEDICINAL PREPS—2 cs, Nazareno Monticello, Livenza, Genoa
MOLASSES—578,000 gls, Eastern Alcohol Corpn, Athelcrest, Guantanamo
940,000 gls, Eastern Alcohol Corpn, Athelcrest, Cienfuegos
1,619,000 gls, American Trade & Import Co, Antietam, Port Tarafa
358,023 gls, American Trade & Import Co, Antietam, Havana
MYROBALANS—5,961 pockets, Standard Bank of South Africa, West Honaker, Calcutta
OIL, CASTOR—100 dms, City of Flint, Hull
FUEL—907,886 bbls, in bulk, Guaranty Trust Co, Karplinger, Poti
LUBRICATING—120 dms, Hagen, Hamburg
OLIVE—2 cks, Luxpalile, Palermo
OLIVE SULPHUR—100 bbls, Seaboard National Bank, Luxpalile, Catania
197 bbls, Luxpalile, Leghorn
PALM—428 cks, Hagen, Hamburg
RAPE—100 dms, City of Flint, Hull
150 dms, Havana, Kobe
VARNISH—2 cs, Art Import Co, Liberty Havre
OILMEAL, LINSEED—12,658 bgs, The Angeles, Buenos Aires
8,210 bgs, Louis Dreyfuss & Co, Phidias, Rosario
8,397 bgs, Louis Dreyfuss & Co, Phidias, Buenos Aires
PETROLEUM, CRUDE—25,000 bbls, in bulk, Texas Co, Dungannon, Tampico
93,600 bbls, in bulk, Sun Oil Co, Delaware Sun, Aruba
75,000 bbls, in bulk, Gulf Refining Co, Gulfpoint, Las Piedras
POTASH, CAUSTIC—20 dms, American Irving Exchange & Trust Co, Natirar, Hamburg
68 dms, Hagen, Hamburg
MURIATE—2,000 bgs, N V Potash Export My, Coahoma County, Antwerp
998,000 lbs, N V Potash Export My, Coahoma County, Antwerp
SILICATE—10 cks, Philadelphia Quartz Co, Waaldijk, Rotterdam
SEED, CARAWAY—100 bgs, Equitable Trust Co, Waaldijk, Rotterdam
FENUGREEK—110 bgs, Devonian, Liverpool
SHELLAC—142 bgs, Waaldijk, Rotterdam
160 bgs, Hagen, Hamburg
25 bgs, American Exchange-Irving Trust Co, Malhar, Calcutta
775 bgs, Malhar, Calcutta
SODA, CYANIDE—300 cs, Roessler & Hasslacher Chemical Co, Westfalen, Hamburg
NITRATE—102 cks, Kuttroff, Pickhardt & Co, Hagen, Hamburg
257 cks, Kuttroff, Pickhardt & Co, Maine, Oslo
TITANIUM OXIDE—5 cks, Waaldijk, Rotterdam
VARNISH, CORRECTING—2 cs, Pennsylvania Railroad Co, Hagen, Hamburg

Imports at San Francisco

AGAR AGAR—5 bls, Dodwell & Co, Ltd, Ibukisan, Kobe
5 bls, Consumer Import Co, Ibukisan, Kobe
ALUM POTASH—33 bbls, Axel Johnson, Gothenburg
ARSENIC—132 cs, Wales, Yokohama

Current Prices are now printed in connection with the Market Reports. See index, page 2.

Odor as a Sales Appeal

Color is used everywhere to beautify and render more pleasant our daily lives and surroundings. Today, one can scarcely find a product, home or even a toy whose value has not been enhanced by its color.

Odors appeal to the sense of smell—just as colors appeal to the sense of sight.

Our daily increasing standard of living makes it imperative for you to beautify your products with odors of a pleasant nature, in order to give them greater sales appeal.

In many industries much could be done in the way of eliminating unpleasant odors in countless products. Perhaps more than mere deodorization would be preferable in some cases. A distinctive and agreeable odor will identify your product so that the two, product and odor, will be associated in the mind of the consumer.

You may thus let your merchandise advertise itself. You have promoted your own good-will and finally you have evolved an odor trade-mark — all this thru the use of an odor incorporated in your material at some juncture in the manufacturing process.

We specialize in the manufacture of ODORS and DEODORANTS.

Permit us to study your problems.

TRADE GIVAUDAN SYNTHETICS DELAWANNA MARK

GIVAUDAN-DELAWANNA, Inc.

101 FIFTH AVENUE, NEW YORK CITY

BEANS, COCOA—700 bgs, Fruit Dispatch Co, La Perla, Port Limon
VANILLA—36 cs, Williams, Dimond & Co, Maunganui, Papeete
BITTERS—100 cs, Adams & Co, Emil Kirdorf, Hamburg
BLEACHING POWDER—50 dms, Henry C Hacke, Emil Kirdorf, Hamburg
BONE FLOUR—870 bgs, Emil Kirdorf, Hamburg
MEAL—1,600 bgs, Bank of California, Silveroak, Calcutta
2,000 bgs, Balfour, Guthrie & Co, Silveroak, Calcutta.
CAMPHOR, CRUDE—250 cs, Ibukisan, Kobe
REFINED—100 cs, Arthur G Callier, Ibukisan, Kobe
275 cs, Mitsui & Co, Ltd, Iukisan, Kobe
CASSIA—500 bls, Keller & Chistensen, Inc, Golden Dragon, Hongkong
HONAN—75 bls, H M Newhall & Co, Golden Dragon, Hongkong
SAIGON—100 bls, H M Newhall & Co, Golden Dragon, Hongkong
CHEMICALS—20 cks, Braun-Knecht-Heimann Co, Emil Kirdorf, Hamburg
15 cs, Braun-Knecht-Heimann Co, Emil Kirdorf, Hamburg
3 kgs, Anglo & London-Paris National Bank, Emil Kirdorf, Hamburg
298 dms, Emil Kirdorf, Antwerp
200 cks, Emil Kirdorf, Antwerp
CLOVES—30 bgs, Silverray, Singapore
COCONUT, DESIC—1,257 cs, Philippine Desiccated Coconut Corp, West Henshaw, Zamboanga
COPRA—931,608 tons, El Dorado Oil Works, Golden Dragon, Cebu
715 tons, Best Foods, Inc, Golden Dragon, Cebu
223,246 lbs, El Dorado Oil Works, Silverray, Davao
208 bgs, Anglo & London-Paris National Bank, Sierra, Suva
2,447 bgs, Atkins, Kroll & Co, Sierra, Pago Pago
400 tons, Vegetable Oil Corp, West Henshaw, Jolo
1,174 tons, Vegetable Oil Corp, West Henshaw, Zamboanga
697 tons, Vegetable Oil Corp, West Henshaw, Gorontalo
413 tons, Vegetable Oil Corp, West Henshaw, Ternate
197 tons, Vegetable Oil Corp, West Henshaw, Menado
641 tons, El Dorado Oil Works, West Henshaw, Zamboanga
14 bgs, Union Steamship Co, Maunganui, Rarotonga
14,224 bgs, Kidder, Peabody & Co, Maunganui, Papeete
EARTH, FULLER'S—400 bgs, Fred K Higbie Supply Co, Radnorshire, London
FLOWERS, INSECT—175 bls, Western Drug Importers, Inc, Wales, Kobe
GLASS, ROUGH—5 cs, Lazard Bros, Emil Kirdorf, Hamburg
WINDOW—5 cs, Security Trust & Savings Bank, Emil Kirdorf, Hamburg
GRAPHITE DUST—750 bgs, Mitsui Bussan Kaisha, Hamburg, Fusan
GUM—155 bgs, Atkins, Kroll & Co, Radnorshire, London
INK, PRINTING—2 cs, W J Byrnes & Co, Emil Kirdorf, Hamburg
MACE—30 cs, Silverray, Singapore
NUTMEGS—50 cs, Catz American Co, Inc, Silverray, Macassar
OIL, CAMPHOR—100 dms, Magnus, Mabee & Reynard, Inc, Ibukisan, Kobe
CHINAWODD—410 tons, Werner G Smith Co, Kako, Hankow
300 tons, McKesson & Robbins, Inc, Olympia, Shanghai
COD—100 dms, Wilbur-Ellis Co, Ibukisan, Kobe
CITRONELLA—4 dms, Palmolive-Peet Co, Silverray, Batavia
EUCALYPTUS—2 dms, W J Bush Citrus Products Co, Waiotapu, Melbourne
100 cs, Atkins, Kroll & Co, Waiotapu, Melbourne
3 dms, Atkins, Kroll & Co, Waiotapu, Melbourne
50 cs, Blumauer Frank Drug Co, Waiotapu, Melbourne
FISH—50 dms, Wales, Yokohama
LUBRICATING—14 dms, Kuhne, Libby & Co, Emil Kirdorf, Antwerp
PALM—155 bbls, Silveroak, Belawan
146 cks, Silverray, Telok Betong
RAPYESEED—25 dms, Radnorshire, London
OILMEAL, LINSEED — 500 bgs, Balfour, Guthrie & Co, Ibukisan, Kobe
SOYA BEAN—2,000 bgs, Chichester & Co, Olympia, Dairen
2,000 bgs, Pacific Vegetable Oil Co, Olympia, Dairen
2,000 bgs, Balfour, Guthrie & Co, Olympia, Dairen
2,702 bgs, Albers Bros Milling Co, Olympia, Dairen
PAINT—1 dm, California Corrugated Culvert Co, Axel Johnson, Stockholm
PEPPER, BLACK—165 bgs, Silveroak, Batavia
165 bgs, J A Folger & Co, Silverray, Telok Betong
83 bgs, McClintock-Stern Co, Inc, Silverray, Telok Betong
332 bgs, Catz American Co, Inc, Silverray, Telok Betong
85 bgs, Silverray, Telok Betong
40 bgs, Silverray, Batavia
WHITE—33 bgs, Silveroak, Batavia
50 bgs, S H Tyler & Son, Silveroak, Batavia
POTASH, NITRATE—20 bgs, Synthetic Nitrogen Products Corp, Emil Kirdorf, Hamburg
SULPHATE—300 bgs, Wilson & Geo Meyer & Co, Emil Kirdorf, Hamburg
SEED, HEMP—334 bgs, Albers Bros Milling Co, Olympia, Dairen
RAPE—462 bgs, Pacific National Bank, Olympia, Otaru
375 bgs, A G Dunn, Olympia, Otaru
624 bgs, Olympia, Otaru
SODA, NITRATE—18 cks, Kuttroff, Pickhardt & Co, Emil Kirdorf, Hamburg
182 bgs, Kuttroff, Pickhardt & Co, Emil Kirdorf, Hamburg
STARCH—80 cs, Kwong Yick, West Henshaw, Hongkong
TANKAGE—400 bgs, Willits & Co, Waiotapu, Lyttleton
TAPIOCA FLOUR—910 bgs, Catz American Co, Silverray, Batavia
ROOTS, GROUND—1,389 bgs, Bank of California, Silveroak, Samarang
1,000 bgs, Consolidated Milling Co, Silveroak, Samarang
2,250 bgs, Silveroak, Samarang
885 bgs, Pacific National Bank, Silverray, Samarang
2,361 bgs, Balfour, Guthrie & Co, Silverray, Samarang
1,253 bgs, Bank of California, Silverray, Samarang
2,500 bgs, Balfour, Guthrie & Co, Silverray, Samarang
TAR, WOOD—35 dms, Bradley & Ekstrom, Axel Johnson, Stockholm
UREA—30 bgs, Wilson & George Meyer & Co, Emil Kirdorf, Hamburg
WATER, MINERAL—50 cs, Henry Trading Corp, Radnorshire, London
WAX, JAPAN VEGETABLE—50 cs, Pacific Trading Co, Wales, Kobe
MONTAN, CRUDE—225 bgs, Emil Kirdorg, Hamburg

Imports at Savannah

FERTILIZER, NITROGENOUS — 660,374 lbs, Luossa, Antwerp
POTASH, MANURE SALT, 20 percent—713,360 lbs, Luossa, Antwerp
MANURE SALT, 30 percent — 350,240 lbs, Luossa, Antwerp
MURIATE, 50 percent — 329,305 lbs, k-20, Luossa, Antwerp
MURIATE, 55 percent — 478,991 lbs, k-20, Luossa, Antwerp
SULPHATE—119,748 lbs, Luossa, Antwerp
SYLVINITE, 12 percent—2,598,200 lbs, k-20, bulk, Luossa, Antwerp

Imports at Seattle

AGAR AGAR—5 bls, K Peabody, Talthybius, Kobe
BRUSHES—2 cs, 240 lbs, Kress & Co, Talthybius, Kobe
3 cs, 360 lbs, New York Merchandise Co, Talthybius, Kobe
1 cs, 120 lbs, J Irwin Co, Talthybius, Kobe
CHEMICALS—9 dms, Lippe, Hamburg
OIL—3 dms, P Dryer, Talthybius, Hongkong
120 cks, M Furuya, Talthybius, Kobe
100 dms (New York), Talthybius, Kobe

Shipments Between Domestic Ports

Baton Rouge Domestic Shipments

DISTILLATE—116,000 bbls, H H Rogers, New York
OIL, FUEL—40,000 bbls, Pioneer, Mobile

Galveston Domestic Shipments

GREASE—60 trcs, El Valle, New York
PETROLEUM, CRUDE — 27 bbls, Hugoton, New York
115,000 bbls, A C Bedford, New York
34 bbls, Chester O Swain, New York
47 bbls, J C Donnell, Philadelphia
24,000 bbls, E J Sadler, New York
75 bbls, Rochester, New York

Houston Domestic Shipments

GASOLINE—44,000 bbls, E W Sinclair, New Orleans
KEROSENE—6,400 bbls, E W Sinclair, New Orleans
OIL, LUBRICATING—27,000 bbls, Livingston Roe, New York

Los Angeles Domestic Shipments

GASOLINE—13,764 bbls, Radiant Hoquiam
33,574 bbls, Solitaire, San Francisco
5,200 bbls, S & C Barge No 2, San Diego
3,636 bbls, S & C Barge No 41, San Diego
77,732 bbls, Watertown, Philadelphia
77,315 bbls, Franklin K Lane, New York
78,014 bbls, Atlantic Sun, Philadelphia
79,459 bbls, Dean Emery, Baltimore
74,191 bbls, Hadnot, Philadelphia
KEROSENE—670 bbls, S & C Barge No 41, San Diego
OIL, DIESEL—1,505 bbls, Warwick, Seattle
FUEL—9,285 bbls, Radiant, Hoquiam
67,588 bbls, Emma H Coppage, Everett
32,465 bbls, El Segundo, Portland
OIL, FUEL—46,418 bbls, Capt A F Lucas, Willbridge
65,334 bbls, J C Fitzsimmons, Richmond
PETROLEUM, CRUDE — 208,000 bbls, H M Storey, Richmond
74,367 bbls, Mericos H Whitter, Avon
74,655 bbls, District of Columbia, Richmond
79,439 bbls, David McKelvy, Avon
75,814 bbls, Betterton, Avon
TOPS—88,344 bbls, Byron D Benson, New York

Mobile Domestic Shipments

ROSIN—14 tons, Suscolanco, Los Angeles
50 tons, Suscolanco, San Francisco
22 tons, Suscolanco, Seattle
TURPENTINE — 35 tons, Suscolanco, San Francisco

New Orleans Domestic Shipments

ACID, OXALIC—11 tons, Point Gorda, Los Angeles
10 tons, Point Gorda, San Francisco
ALCOHOL—80 dms, El Almirante, New York
BLACK, BONE—350 bgs, Creole, New York
DRUGS—13 tons, Florence Luckenbach, Portland
44 tons, Florence Luckenbach, San Francisco
MOLASSES—1,500 cs, Creole, New York
16 tons, Point Gorda, San Diego
17 tons, Florence Luckenbach, Seattle
62 tons, Florence Luckenbach, Los Angeles
50 bbls, El Almirante, New York
OIL—150 bbls, El Almirante, New York
LUBRICATING—14 tons, Florence Luckenbach, Los Angeles
ROSIN—200 bbls, Creole, New York
80 bbls, El Almirante, New York
SOAP—21 tons, Florence Luckenbach, Seattle
WAX—15 tons, Florence Luckenbach, San Francisco
65 tons, Florence Luckenbach, Los Angeles

Recent Exports from U. S. Ports

Exports from New York

ACETONE—35,069 lbs, Silverash, Kobe
ACID, ACETIC, GLACIAL—6,120 lbs, Maravi, Puerto Colombia
BATTERY—1,200 lbs, West Isleta, East London
1,200 lbs, West Isleta, Durban
CITRIC—1,172 lbs, Maravi, Puerto Colombia
STEARIC—2,555 lbs, Silverash, Chinnampo
SULPHURIC—56,525 lbs, Flora, Curacao
4,107 lbs, Yoro, Kingston
ACID, TARTARIC—2,164 lbs, Antilla, Tampico
AMMONIA—1,629 lbs, Porto Rico, San Juan
ASPHALT—68,485 lbs, Rigel, Malaga
13,218 lbs, Rigel, Barcelona
7,025 lbs, United States, Copenhagen
13,200 lbs, Silverash, Shanghai
84,506 lbs, Vandijk, Buenos Aires
13,800 lbs, West Isleta, Cape Town
9,900 lbs, West Isleta, Port Elizabeth
ASPHALT—7,260 lbs, West Isleta, East London
6,600 lbs, West Isleta, Port Natal
10,395 lbs, La Playa, Kingston
CORE—87,171 lbs, Franconia, Liverpool
87,330 lbs, Celtic, Liverpool
LIQUID—6,072 lbs, Bristol City, Bristol
12,020 lbs, Schodack, Havre
49,040 lbs, Celtic, Liverpool
PREPARED—117,762 lbs, Cubano, Rio de Janeiro
SOLID—105,952 lbs, Franconia, Liverpool
BEANS, COCOA—399,656 lbs, Stadsdijk, Rotterdam
BLEACHING POWDER—1,175 lbs, Cameronia, Glasgow
CADMIUM METAL—9,625 lbs, Collamer, Havre
CALCIUM CARBIDE—97,140 lbs, Betty, Gibara
10,230 lbs, Zarembo, Port of Spain
16,255 lbs, Antilla, Tampico
41,670 lbs, La Playa, Preston
148,000 lbs, Toronto, Manila
CARBON BISULPHIDE — 2,075 lbs, Norden, Tapachula
CHALK—4,440 lbs, Coamo, San Juan
CHICLE—692 lbs, Collamer, Havre
CLAY—6,672 lbs, France, Havre
COLOR—4,080 lbs, Pan-America, Buenos Aires
LACQUER—79,856 lbs, Collamer, Paris
CORNFLOUR—1,202 lbs, Pacific, Nuevitas
2,658 lbs, Maravi, Santiago
79,500 lbs, West Eldara, Antwerp
1,576 lbs, Norden, Puerto Mexico
1,485 lbs, La Playa, Preston
60,300 lbs, Toloa, Havana
21,810 lbs, Toronto, Shanghai
CYANAMIDE—101,192 lbs, Coamo, San Juan
CYANIDE, CRUDE—30,150 lbs, Antilla, Tampico
109,000 lbs, West Isleta, Lourenco Marques
DEXTRIN, CANARY — 17,040 lbs, Stadsdijk, Rotterdam
CORN—34,827 lbs, Toronto, Shanghai
DYES—31,541 lbs, Silverash, Kobe
425,062 lbs, Silverash, Shanghai
3,118 lbs, Toronto, Cebu
ETHYLIDINANILIN — 846 lbs, Bristol City, Bristol
EXTRACT, LOGWOOD—1,085 lbs, Pennland, Antwerp
6,084 lbs, West Isleta, Algoa Bay
5,216 lbs, Bruyere, Buenos Aires
58,595 lbs, Celtic, Liverpool
TANNING—7,356 lbs, Viborg, Santo Domingo
7,132 lbs, Viborg, Macoris
TOBACCO—2,061 lbs, Norefjord, Stavanger
WITCH HAZEL—1,480 lbs, Franconia, Liverpool
2,117 lbs, Minnesota, London
FERTILIZER—12,072 lbs, Toloa, Pt Limon
15,110 lbs, Toloa, Guayaquil
56,448 lbs, La Playa, Falmouth
56,448 lbs, Maravi, Puerto Colombia
20,000 lbs, Porto Rico, Arroyo
FORMALDEHYDE—3,523 lbs, Cubano, Rio de Janeiro
GASOLINE—500 gls, Reinbeck, San Pedro
6,300 gls, Ceiba, Kingston
8,000 gls, Berury, Para
5,000 gls, Berury, Maranhao
17,000 gls, Berury, Parnahyba
20,000 gls, Berury, Ceara
500 gls, Zarembo, Grand Popo
6,375 gls, Zarembo, Cotonou
10,505 gls, Zarembo, Las Palmas
12,000 gls, Zarembo, Accra
1,375 gls, West Humhaw, Freetown
5,750 gls, West Humhaw, Monrovia
1,650 gls, West Humhaw, Lagos
10,000 gls, West Humhaw, Grand Bassam
10,000 gls, West Humhaw, Duala
3,355 gls, West Humhaw, Libreville
3,300 gls, West Humhaw, Santa Isabel
37,150 gls, West Humhaw, Leo
210 gls, Yoro, Black River
840 gls, Yoro, Falmouth
6,300 gls, Yoro, Kingston
50,000 gls, Cubano, Rio de Janeiro
170 gls, Terne, Turks Islands
8,000 gls, Edvard Munch, Cayenne
1,275 gls, Edvard Munch, Paramaribo
13,420 gls, Edvard Munch, Demerara
GLUCOSE, SOLID—26,360 lbs, Pennland, Antwerp
GRAPHITE—27,314 lbs, United States, Oslo
POWD—6,212 lbs, France, Havre
GREASE, ANIMAL—192,579 lbs, Stadsdijk, Rotterdam
LUBRICATING—3,150 lbs, Bruyere, Bahia Blanca
3,944 lbs, Edvard Munch, Paramaribo
8,404 lbs, Edvard Munch, Ciudad
13,800 lbs, West Isleta, Durban
5,500 lbs, West Isleta, Lourenco Marques
8,435 lbs, West Isleta, Beira
9,687 lbs, West Humhaw, Accra
2,100 lbs, West Humhaw, Duala
669 lbs, West Humhaw, St Thome
16,536 lbs, West Humhaw, Kinasha
30,679 lbs, Cameronia, Glasgow
2,661 lbs, Vestalia, Buenos Aires
7,964 lbs, De Grasse, Havre
4,087 lbs, Paris, Havre
1,944 lbs, Tijuca, Montevideo
11,143 lbs, Cubano, Rio de Janeiro
6,926 lbs, United States, Oslo
28,269 lbs, United States, Copenhagen
3,293 lbs, Zarembo, Bissao
20,091 lbs, Zarembo, Dakar
17,365 lbs, Silverash, Yokohama
6,172 lbs, Bristol City, Bristol
1,030 lbs, Berury, Parnahyba
2,412 lbs, Nordbo, Buenos Aires
4,087 lbs, Rigel, Palma de Mallores
40,265 lbs, Conte Biancamano, Genoa
1,911 lbs, Conte, Biancamano, Naples
81,159 lbs, Scythia, London
795 lbs, Pan America, Buenos Aires
51,273 lbs, Franconia, Liverpool
919 lbs, Maine, Vancouver
2,247 lbs, Toloa, Caibarien
8,800 lbs, Toloa, Cienfuegos
17,590 lbs, Toloa, Nuevitas
17,565 lbs, Toloa, Sagua Grande
19,863 lbs, Toloa, Havana
4,288 lbs, Reinbeck, Puerto Plata
934 lbs, Reinbeck, San Pedro
85,672 lbs, Minnesota, London
15,017 lbs, Adrastus, Manila
141,084 lbs, Adrastus, Pt Swettinham
49,370 lbs, Collamer, Havre
26,025 lbs, Chicago City, Bristol
30,034 lbs, Celtic, Liverpool
GUM, ALOES—29,539 lbs, Lancastria, London
TRAGACANTH—5,075 lbs, Minnesota, London
GYPSUM—22,000 lbs, Pacific, Nuevitas
HAIR, RABBIT, WASTE—5,228 lbs, West Eldara, Antwerp
HYDROGEN PEROXIDE—6,851 lbs, Silverash, Manila
INK, PRINTING—6,675 lbs, Nordbo, Buenos Aires
27,416 lbs, Cubano, Santos
3,490 lbs, Porto Rico, San Juan
55,200 lbs, Bruyere, Buenos Aires
4,433 lbs, West Isleta, Durban
6,860 lbs, Pan American, Buenos Aires
5,075 lbs, Pan American, Rio Janeiro
INSECTICIDE—4,360 lbs, Porto Rico, San Juan
KEROSENE—30,000 gls, Berury, Ceara
12,400 gls, Berury, Parnahyba
15,000 gls, Berury, Maranhao
5,500 gls, Martinique, Pt Prince
3,000 gls, Zarembo, Grand Popo
6,000 gls, Zarembo, Marri
4,000 gls, Zarembo, Onitsha
27,500 gls, Zarembo, Las Palmas
250 gls, Mayaro, Bolivar
550 gls, Dominica, Antigua
30,000 gls, West Humhaw, Sekondi
35,000 gls, West Humhaw, Cotonou
25,000 gls, West Humhaw, Accra
10,000 gls, West Humhaw, Duala
KEROSENE—20,000 gls, West Humhaw, Lagos
27,500 gls, West Humhaw, Leo
1,000 gls, Terne, Turks Islands
267,414 gls, Zoroaster, Stockholm and Oxelosund
250 gls, Edvard Munch, Cayenne
2,750 gls, Reinbeck, Pto Plata
12,000 gls, Reinbeck, San Pedro
2,100 gls, Silvia, St Johns
200 gls, La Playa, Kingston
1,000 gls, La Playa, Preston
LACQUER—7,079 lbs, West Isleta, Durban
3,366 lbs, Pan American, Buenos Aires
2,550 lbs, Independence Hall, Bordeaux
CLEAR—3,618 lbs, Rigel, Barcelona
COLORED—2,781 lbs, Rigel, Malaga
2,608 lbs, Rigel, Barcelona
PYROXYLIN—1,285 lbs, Silverash, Kobe
2,819 lbs, Vandyk, Rio Janeiro
5,355 lbs, West Eldora, Antwerp
13,833 lbs, Collamer, Paris
THINNER—400 gls, Rigel, Malaga
LARD—93,700 lbs, Maravi, Pto Colombia
3,150 lbs, Norefjord, Oslo
13,342 lbs, Norefjord, Trondhjem
724,934 lbs, Stadsdijk, Rotterdam
61,750 lbs, Stadsdijk, Mannheim
36,650 lbs, Carobobo, Maracaibo
60,341 lbs, Cameronia, Glasgow
6,100 lbs, United States, Wiborg
79,300 lbs, United States, Helsingfors
148,517 lbs, United States, Copenhagen
1,650 lbs, United States, Larvik
38,258 lbs, United States, Oslo or Copenhagen
2,380 lbs, Zarembo, Las Palmas
11,285 lbs, Mayaro, Bolivar
57,850 lbs, Pacific, Caibarien
16,328 lbs, Pacific, Cardenas
129,750 lbs, Bristol City, Cardiff
8,800 lbs, Orizaba, Havana
42,580 lbs, Betty, Tanamo
30,500 lbs, Majestic, Southampton
4,380 lbs, Pennland, Antwerp
82,800 lbs, Scythia, London
23,414 lbs, Drottingholm, Gothenburg
13,000 lbs, Drottingholm, Gothenburg or Stockholm
90,187 lbs, Franconia, Liverpool
12,931 lbs, Viborg, Macoris
66,150 lbs, Toloa, Havana
3,200 lbs, Presidente Wilson, Palermo
30,175 lbs, Presidente Wilson, Cagliari
78,460 lbs, Presidente Wilson, Genoa
210,225 lbs, Presidente Wilson, Trieste
11,740 lbs, Silvia, St Johns
26,526 lbs, Reinbeck, Sto Domingo
1,966,250 lbs, Minnesota, London
325,000 lbs, Reliance, Danzig
44,276 lbs, Hellig Olav, Helsingfors
22,338 lbs, Hellig Olav, Stavanger
11,716 lbs, Hellig Olav, Copenhagen
32,563 lbs, Collamer, Dunkirk
102,872 lbs, Independence Hall, Bordeaux
312,400 lbs, Lancaster, London
113,700 lbs, Celtic, Liverpool
LEAD, RED—2,120 lbs, La Playa, Preston
WHITE—60,502 lbs, Celtic, Liverpool
LEAVES—5,313 lbs, Stadsdijk, Rotterdam
LITHOPONE—8,106 lbs, Maine, Vancouver
MAGNESIA, CALCINED—1,558 lbs, Porto Rico, San Juan
MILK—3,375 lbs, Silverash, Manila
METHANOL—2,300 gls, Silverash, Yokohama
MILK POWDER—1,628 lbs, Zarembo, Pt of Spain
3,129 lbs, Silverash, Shanghai
2,130 lbs, Tijuca, Montevideo
6,225 lbs, Coamo, San Juan
MONOCHLOROBENZENE—40,785 lbs, West Eldara, Antwerp
NAPHTHA—40,000 gls, Zarembo, Grand Popo
40,000 gls, Zarembo, Whydah
16,000 gls, Zarembo, Cotonou
16,000 gls, Zarembo, Lagos
8,000 gls, Zarembo, Warri
16,000 gls, Zarembo, Koko
8,000 gls, Zarembo, Sapele
21,600 gls, Zarembo, Accra
113,000 gls, Zarembo, Dakar
16,000 gls, Zarembo, Bissao
34,400 gls, Zarembo, Sekondi
8,000 gls, Zarembo, Dinkwa
29,000 gls, Zarembo, Saltpond
48,000 gls, West Humhaw, Accra
40,000 gls, West Humhaw, Winnebah
30,000 gls, West Humhaw, Grand Bassam
12,000 gls, West Humhaw, Santa Isabel
56,000 gls, West Humhaw, Lagos
86,000 gls, West Humhaw, Sekondi
32,000 gls, West Humhaw, Loanda
185,800 gls, West Humhaw, Kinashasa
40,000 gls, West Humhaw, Boma
16,000 gls, West Humhaw, Lobito Bay
14,200 gls, West Humhaw, Duala
8,000 gls, West Humhaw, Monrovia
63,000 gls, Tijuca, Montevideo
70,000 gls, Cubano, Campana
154,014 gls, Zoroaster, Stockholm and/or Oxelosund
60,000 gls, West Isleta, Lourenco Marques
48,850 gls, West Isleta, Cape Town
DEODORIZED—29,486 gls, Zoroaster, Stockholm and Oxelosund
NICKEL OXIDE—120,696 lbs, Stadsdijk, Rotterdam
NUTMEGS—8,601 lbs, Stadsdijk, Amsterdam
OCHER, PERUVIAN — 50,528 lbs, United States, Libau
OIL, CHINAWOOD—6,870 lbs, Tijuca, Buenos Aires
COALTAR — 7,500 lbs, Corner Brook, Newfoundland
COCONUT—1,640 lbs, Toloa, Havana
CODLIVER—5,168 lbs, Norefjord, Bergen
COMPOUND—1,344 gls, Pennland, Strassburg
6,552 gls, Independence Hall, Bordeaux
COMPRESSER — 3,410 gls, Cubano, Rio de Janeiro
COOKING—8,298 lbs, Reinbeck, Puerto Plata
14,296 lbs, Reinbeck, Monte Cristy
7,804 lbs, Reinbeck, Santo Domingo
CORDAGE—183,333 lbs, Pacific, Matanzas
COTTONSEED—28,175 lbs, Silvia, St Johns
CUTTING—550 gls, Vandijk, Buenos Aires
EDIBLE—1,372 lbs, Pacific, Matanzas
10,510 lbs, Maravi, Santiago
2,288 lbs, West Isleta, Cape Town
4,118 lbs, West Isleta, Algoa Bay
4,850 lbs, West Isleta, Lourenco Marques
8,750 lbs, La Playa, Santiago
2,464 lbs, Toloa, Guayaquil
ENGINE—3,384 gls, Bristol City, Cardiff
1,680 gls, Chicago City, Cardiff
3,575 gls, Catatumbo, Maracaibo
ESSENTIAL—2,515 lbs, Silverash, Kobe
519 lbs, Franconia, Liverpool
FUEL—2,750 gls, Zarembo, Dakar
16,000 gls, Zarembo, Kumasi
3,300 gls, West Humhaw, Loanda
13,200 gls, West Humhaw, Sekondi
770 gls, West Humhaw, Libreville
1,375 gls, West Humhaw, Santa Isabel
20,000 gls, Cubano, Rio de Janeiro
330 gls, Terne, Turks Islands
LINSEED—9,485 lbs, Pacific, Cardenas
3,700 lbs, Pacific, Nuevitas
7,889 lbs, Pacific, Sagua
35,185 lbs, Barbara, Cienfuegos
3,272 lbs, Carabobo, Puerto Cabello
9,493 lbs, Viborg, Puerto Plata
4,539 lbs, La Playa, Preston
LUBRICATING—330 gls, Coamo, San Juan
1,080 gls, Maravi, Kingston
650 gls, Maravi, Porto Colombia
91,641 gls, Bruyere, Buenos Aires
16,925 gls, Bruyere, Bahia Blanca
15,536 gls, Norefjord, Bergen
7,997 gls, Norefjord, Trondhjem
4,704 gls, Stadsdyk, Rotterdam
820 gls, Stadsdyk, Amsterdam

Current Prices are now printed in connection with the Market Reports. See index, page 2.

OIL, LUBRICATING—500 gls, Stadsdyk, Coblenz
550 gls, Vandyk, Rio de Janeiro
275 gls, Vandyk, Montevideo
3,025 gls, Vandyk, Buenos Aires
3,080 gls, Edvard Munch, Paramaribo
462 gls, Edvard Munch, Cayenne
1,162 gls, Edvard Munch, Demerara
1,540 gls, Edvard Munch, Ciudad
1,210 gls, Carabobo, Maracaibo
550 gls, Carabobo, La Guaira
4,125 gls, Carabobo, Porto Cabello
18,090 gls, West Isleta, Capetown
5,600 gls, West Isleta, Algoa Bay
2,800 gls, West Isleta, East London
12,700 gls, West Isleta, Durban
14,625 gls, West Isleta, Lourenco Marques
440 gls, West Isleta, Bembesi
3,995 gls, West Isleta, Beira
1,650 gls, West Humhaw, Grand Bassam
6,600 gls, West Humhaw, Accra
660 gls, West Humhaw, Duala
7,500 gls, West Humhaw, Santa Isabel
300 gls, West Humhaw, St Thome
3,425 gls, West Humhaw, Libreville
4,950 gls, West Humhaw, Loanda
4,180 gls, West Humhaw, Kinshasa
5,270 gls, West Humhaw, Leo
4,550 gls, Cameronia, Glasgow
4,644 gls, Vestalia, Montevideo
80,424 gls, Vestalia, Buenos Aires
109,620 gls, De Grasse, Havre
15,750 gls, Paris, Havre
13,945 gls, Tijuca, Montevideo
45,940 gls, Cubano, Rio de Janeiro
12,150 gls, Cubano, Santos
6,738 gls, Cubano, Rio Grande
2,750 gls, Cubano, Pelotas
7,264 gls, Cubano, Porto Alegre
1,375 gls, United States, Haugesund
9,875 gls, United States, Oslo
102,967 gls, United States, Copenhagen
8,596 gls, Zarembo, Las Palmas
3,000 gls, Zarembo, Bissao
11,110 gls, Zarembo, Dakar
500 gls, Zarembo, Freetown
300 gls, Zarembo, York Island
220 gls, Zarembo, Grenada
440 gls, Zarembo, Bolivar
2,700 gls, Pacific, Caribarien
550 gls, Pacific, Nuevitas
3,360 gls, Silverash, Yokohama
45,125 gls, Silverash, Kobe
17,490 gls, Antilla, Tampico
10,668 gls, Bristol City, Bristol
756 gls, Bristol City, Cardiff
1,650 gls, Orizaba, Havana
330 gls, Betty, Antilla
3,850 gls, Eurana, Vancouver
2,300 gls, Berury, Maranhao
1,600 gls, Berury, Parnahyba
1,850 gls, Berury, Ceara
495 gls, Martinique, St Marc
375 gls, Martinique, Port Prince
14,254 gls, Nordbo, Buenos Aires
5,884 gls, Rigel, Barcelona
4,620 gls, Rigel, Palma de Mallores
3,850 gls, Zarembo, Accra
1,000 gls, Zarembo, Lagos
740 gls, Zarembo, Warri
330 gls, Zarembo, Sapele
15,674 gls, Conte Biancamano, Genoa
252 gls, Conte Biancamano, Naples
2,270 gls, Pennland, Brussels
9,332 gls, Pennland, Strassborg
14,058 gls, Pennland, Antwerp
395 gls, Pan America, Buenos Aires
2,520 gls, Drottingholm, Gothenburg
50,064 gls, Franconia, Liverpool
660 gls, La Playa, Kingston
550 gls, La Playa, Porto Barrios
21,981 gls, Maine, Vancouver
2,750 gls, Toloa, Cristobal
1,815 gls, Toloa, Puntarenas
1,375 gls, Toloa, Port Limon
775 gls, Toloa, Havana
1,940 gls, Presidente Wilson, Zagreb
3,895 gls, Presidente Wilson, Zeemun
3,590 gls, Presidente Wilson, Timisoara
2,070 gls, Presidente Wilson, Trieste
840 gls, Bermuda, Hamilton
550 gls, Silvia, St John's
1,980 gls, Reinbeck, San Pedro
11,395 gls, West Eldara, Antwerp
11,260 gls, Minnesota, London
4,420 gls, Reliance, Hamburg
42,510 gls, Adrastus, Hongkong
1,230 gls, Adrastus, Haiphong
1,650 gls, Adrastus, Canton
210 gls, Adrastus, Saigon
6,800 gls, Adrastus, Port Swettinham
18,870 gls, Adrastus, Penang
22,200 gls, Adrastus, Singapore
14,520 gls, Adrastus, Bangkok
840 gls, Hellig Olav, Stavanger
2,520 gls, Hellig Olav, Oslo
12,200 gls, Hellig Olav, Copenhagen
1,375 gls, Toronto, Hongkong
3,570 gls, Collamer, Havre
840 gls, Collamer, Dunkirk
19,992 gls, Independence Hall, Bordeaux
12,320 gls, Independence Hall, St Nazaire
840 gls, Independence Hall, Havre
14,070 gls, Independence Hall, Dunkirk
21,084 gls, Lancastria, London
29,968 gls, Celtic, Liverpool

OLEO—27,063 lbs, Pennland, Brussels
89,270 lbs, Silvia, St Johns
21,919 lbs, Drottningholm, Gothenburg
18,205 lbs, United States, Aalborg
87,954 lbs, United States, Oslo or Copenhagen
22,346 lbs, Cameronia, Glasgow
22,717 lbs, Norefjord, Kristiansund
49,934 lbs, Norefjord, Trondhjem
44,765 lbs, Stadsdijk, Rotterdam
89,661 lbs, Franconia, Liverpool
89,376 lbs, Minnetonka, London
17,876 lbs, Hellig Olav, Uleaborg
31,514 lbs, Hellig Olav, Stavanger
44,225 lbs, Hellig Olav, Oslo or Copenhagen
12,520 lbs, Hellig Olav, Oslo
178,030 lbs, Celtic, Liverpool
88,585 lbs, Hellig Olav, Copenhagen

PEPPERMINT—976 lbs, Berengaria, London
1,070 lbs, Berengaria, Southampton
280 lbs, Stadsdijk, Amsterdam
RED—45,739 lbs, West Eldara, Antwerp
SIGNAL—300 gls, Vestalia, Montevideo
3,850 gls, Vestalia, Buenos Aires
SOLA BEAN—2,320 lbs, Pacific, Cardenas
SPRAYING—550 gls, Vandyk, Buenos Aires
TRANSFORMER—1,650 gls, Pennland, Antwerp
550 gls, United States, Copenhagen
330 gls, Cubano, Santos
1,375 gls, Norefjord, Bergen

OIL, TRANSFORMER—1,615 gls, Bruyere, Buenos Aires
1,210 gls, Viborg, Santo Domingo
935 gls, Pan-America, Santos
OILCAKE, COPRA—24,150 lbs, Carabobo, San Juan
FISH—120,684 lbs, Pennland, Antwerp
LINSEED—1,739,403 lbs, West Eldara, Rotterdam or Antwerp
OILMEAL, LINSEED—32,250 lbs, Zaremba, San Fernando
69,300 lbs, Zaremba, Port of Spain
OXYGEN—10,150 lbs, Carabobo, Orangestad
PAINT—14,206 lbs, Coamo, San Juan
2,779 lbs, Maravi, Santiago
2,761 lbs, Bruyere, Buenos Aires
18,436 lbs, Vandyk, Rio Janeiro
5,344 lbs, Carobobo, Maracaibo
3,961 lbs, Carobobo, La Guaira
10,218 lbs, Carobobo, Puerto Cabello
4,172 lbs, West Isleta, Capetown
2,759 lbs, West Isleta, Algoa Bay
3,678 lbs, West Isleta, East London
4,156 lbs, West Isleta, Lourenco Marques
2,086 lbs, West Humhaw, Cape Palmas
13,755 lbs, Tijuca, Camapna
912 lbs, Tijuca, Rosario
2,922 lbs, Cubano, Rio Janeiro
2,515 lbs, Pacific, Caibarien
5,860 lbs, Pacific, Matanzas
2,406 lbs, Pacific, Pastelillio
5,438 lbs, Pacific, Puerto Tarafa
8,188 lbs, Silverash, Kobe
2,420 lbs, Silverash, Tientsin
1,523 lbs, Amapala, Kingston
12,274 lbs, Betty, Antilla
10,230 lbs, Flora, Maracaibo
1,924 lbs, Nordbo, Buenos Aires
2,043 lbs, Nordbo, Montevideo
10,484 lbs, Pan-America, Buenos Aires
5,404 lbs, Reinbeck, La Romana
3,493 lbs, Collamer, Paris
2,125 lbs, Toronto, Manila
ASPHALT—1,000 lbs, Eurana, Vancouver
COPPER—2,348 lbs, Toloa, Havana
DRY—1,239 lbs, West Eldara, Antwerp
EARTH—8,270 lbs, Orizaba, Havana
2,250 lbs, Scythia, London
ENAMEL—2,140 lbs, Toloa, Havana
LIQUID—378 gls, Orizaba, Havana
204 gls, Nordbo, Montevideo
390 gls, Rigel, Barcelona
170 gls, West Isleta, Capetown
252 gls, La Playa, Santiago
186 gls, Hellig Olav, Oslo
OIL—1,924 lbs, Vestalia, Montevideo
PASTE—4,984 lbs, Rigel, Barcelona
1,710 lbs, Silverash, Kobe
PREPARED—52,950 lbs, Cubano, Santos
2,708 lbs, Maravi, Santiago
THINNER—20,000 gls, Cubano, Rio Janeiro
1,860 gls, Bruyere, Buenos Aires
1,555 gls, West Isleta, East London
1,000 gls, West Isleta, Lourenco Marques
PETROLATUM, LIQUID—2,432 lbs, Cubano, Santos
MEDICINAL—2,871 lbs, West Isleta, Port Natal
1,644 lbs, West Isleta, East London
720 lbs, West Isleta, Lightenburg
1,440 lbs, West Isleta, Lourenco Marques
1,200 lbs, West Isleta, Johannesburg
11,988 lbs, West Isleta, Copenhagen
PETROLEUM, REFD—2,000 gls, Martinique, St Marc
2,500 gls, Martinique, Gonaives
10,000 gls, Martinique, Cape Haitien
22,000 gls, Zarembo, Accra
11,000 gls, Zarembo, Nsawam
25,000 gls, Zarembo, Whydah
40,660 gls, Zarembo, Cotonou
50,001 gls, Zarembo, Lagos
20,000 gls, Zarembo, Grand Popo
30,000 gls, Zarembo, Warri
20,000 gls, Zarembo, Kobo
20,000 gls, Zarembo, Sapele
20,000 gls, Zarembo, Las Palmas
20,000 gls, Zarembo, Dakar
10,000 gls, Zarembo, Conakry
10,000 gls, Zarembo, Sekondi
5,000 gls, Zarembo, Bissao
21,000 gls, Zarembo, Saltpond
89,990 gls, West Isleta, Durban
56,000 gls, West Isleta, Lourenco Marques
50,000 gls, West Isleta, East London
99,980 gls, West Isleta, Capetown
10,000 gls, Mayaro, Demarara
19,990 gls, Yoro, Kingston
1,000 gls, Yoro, Black River
110,000 gls, Cubano, Rio Janeiro
150,000 gls, Cubano, Campana
150,000 gls, Cubano, Rosario
3,000 gls, Dominica, St Kitts
1,750 gls, Dominica, St Lucia
67,700 gls, West Humshaw, Lagos
25,000 gls, West Humshaw, Winnebah
72,500 gls, West Humshaw, Kinshasa
12,000 gls, West Humshaw, Sta Isabel
5,000 gls, West Humshaw, Boma
10,000 gls, West Humshaw, Duala
10,000 gls, West Humshaw, Lobito Bay
20,000 gls, West Humshaw, Grand Bassam
12,500 gls, West Humshaw, Monrovia
19,500 gls, West Humshaw, Freetown
1,500 gls, Carobobo, Pto Cabello
2,000 gls, Carobobo, La Guaira
5,000 gls, Carobobo, Maracaibo
5,000 gls, Carobobo, Curacao
2,000 gls, Edvard Munch, Maroni
2,000 gls, Edvard Munch, St Laurent
15,000 gls, Edvard Munch, Demerara
25,000 gls, Edvard Munch, Cayenne
12,815 gls, Edvard Munch, Demerara
22,000 gls, Porto Rico, San Juan
500 gls, Terne, Turks Islands
22,000 gls, Zarembo, Accra
10,000 gls, Toloa, Cristobal
10,000 gls, Toloa, Bocas Toro
10,000 gls, Celba, Kingston
RESIDUE—6,300 gls, Bristol City, Cardiff
825 gls, Cubano, Rio Grande
POTASH, CHLORATE—14,110 lbs, Martinique, Pto Colombia
ROOT, SENEGA—465 lbs, United States, Oslo
ROSIN—9,250 lbs, Edvard Munch, Surinam
SAND, FILTERING—266,850 lbs, Minnesota, London
ZEOLITE—20,000 lbs, Hellig Olav, Copenhagen
SOAP—8,350 lbs, Maravi, Santiago
1,944 lbs, Porto Rico, San Juan
17,989 lbs, Porto Rico, Ponce
3,450 lbs, Porto Rico, Arroyo
4,590 lbs, West Isleta, Capetown
4,100 lbs, West Isleta, East London
10,600 lbs, West Isleta, Durban

SOAP—12,700 lbs, West Isleta, Pt Natal
12,150 lbs, West Humshaw, Cape Palmas
5,640 lbs, Vestalia, Buenos Aires
3,300 lbs, United States, Reykjavik
3,700 lbs, United States, Copenhagen
5,850 lbs, Betty, Antilla
32,500 lbs, Betty, Tanamo
1,655 lbs, Flora, Maracaibo
21,601 lbs, Martinique, Jeremie
25,000 lbs, Martinique, Gonaives
20,500 lbs, Nordbo, Montevideo
27,615 lbs, Rigel, Barcelona
7,710 lbs, Toloa, Panama
7,981 lbs, Bermuda, Hamilton
4,250 lbs, Silvia, St Johns
3,184 lbs, Reinbeck, La Romana
1,985 lbs, West Eldara, Antwerp
CHIPS—12,502 lbs, Vandijk, Buenos Aires
LAUNDRY—20,500 lbs, Martinique, Pt Prince
19,615 lbs, Maravi, Kingston
9,050 lbs, Reinbeck, Pto Plata
20,500 lbs, La Playa, Kingston
1,819 lbs, La Playa, Falmouth
8,900 lbs, Toronto, Manila
561,050 lbs, Toronto, Cebu
POWDER—1,400 lbs, United States, Oslo
7,150 lbs, Cameronia, Glasgow
18,000 lbs, Porto Rico, San Juan
9,000 lbs, Porto Rico, Ponce
930 lbs, Edvard Munch, Paramaribo
2,950 lbs, La Playa, Santiago
SODA, ASH—2,100 lbs, Mayaro, Pt of Spain
29,210 lbs, Pacific, Matanzas
27,930 lbs, Pacific, Pto Tarafa
23,475 lbs, Cameronia, Glasgow
1,608 lbs, Maravi, Santiago
3,560 lbs, Porto Rico, San Juan
9,272 lbs, Reinbeck, La Romano
107,580 lbs, Toloa, Havana
BICARBONATE—46,050 lbs, Eurana, Vancouver
19,461 lbs, Antilla, Tampico
BICHROMATE—65,776 lbs, Eurana, Vancouver
BISULPHITE—4,152 lbs, Pacific, Caibarien
CAUSTIC—220,000 lbs, Antilla, Tampico
784,336 lbs, Silverash, Kobe
114,880 lbs, Silverash, Yokohama
76,986 lbs, Tijuca, Montevideo
22,085 lbs, Cubano, Rio Janeiro
112,000 lbs, Cubano, Santos
82,060 lbs, Cubano, Campana
11,832 lbs, West Isleta, Durban
144,400 lbs, Toloa, Havana
10,150 lbs, Toronto, Manila
CYANIDE—4,755 lbs, Conte Biancamano, Genoa
PHOSPHATE—2,200 lbs, United States, Copenhagen
SAL—8,600 lbs, Silverash, Chinnampo
3,072 lbs, Silverash, Yokohama
45,210 lbs, Pacific, Pto Tarafa
SULPHITE—9,752 lbs, Silverash, Osaka
SPONGES—840 lbs, De Grasse, Havre
2,942 lbs, Vandijk, Buenos Aires
825 lbs, Presidente Wilson, Trieste
9,147 lbs, Lancastria, London
838 lbs, Schodack, Havre
770 lbs, Hellig Olav, Copenhagen
STARCH, CORN—6,400 lbs, Cameronia, Glasgow
28,300 lbs, Pennland, Antwerp
5,300 lbs, United States, Oslo
4,592 lbs, Pacific, Caibarien
16,400 lbs, Porto Rico, San Juan
31,725 lbs, Stadsdijk, Rotterdam
1,315 lbs, West Isleta, Algoa Bay
3,155 lbs, West Isleta, Durban
1,825 lbs, West Isleta, Beira
3,525 lbs, Hellig Olav, Bergen
6,075 lbs, Toronto, Manila
2,254 lbs, Toronto, Hongkong
14,498 lbs, Celtic, Liverpool
4,087 lbs, Chicago City, Cardiff
LAUNDRY—10,760 lbs, Scythia, London
STEARIN, OLEO—16,486 lbs, United States, Copenhagen
27,158 lbs, Toloa, Havana
SULPHUR—20,368 lbs, Toloa, Rio Grande
20,300 lbs, Adrastus, Singapore
SYRUP, CORN—127,243 lbs, Pennland, Antwerp
67,829 lbs, United States, Oslo
89,644 lbs, Cameronia, Glasgow
22,677 lbs, Stadsdijk, Rotterdam
44,068 lbs, Reliance, Hamburg
89,278 lbs, Drottningholm, Stockholm
22,285 lbs, Hellig Olav, Oslo
20,440 lbs, Toronto, Shanghai
TALC—44,800 lbs, Franconia, Liverpool
44,800 lbs, Celtic, Liverpool
TALLOW—4,386 lbs, Vandijk, Rio de Janeiro
135,968 lbs, Celtic, Liverpool
TURPENTINE—1,000 gls, Cubano, Rio de Janeiro
1,000 gls, Tijuca, Montevideo
VARNISH—2,708 lbs, Rigel, Barcelona
5,286 lbs, Nordbo, Montevideo
3,157 lbs, United States, Copenhagen
2,358 lbs, Cubano, Santos
1,911 lbs, Vandijk, Rio de Janeiro
2,223 lbs, Drottningholm, Helsingborg
6,320 lbs, Drottningholm, Stockholm
1,975 lbs, Pan-America, Rio de Janeiro
INSULATING—32,817 lbs, Independence Hall, Bordeaux
WAX, CANDELILLA—2,312 lbs, Vandijk, Buenos Aires
CARNAUBA—11,616 lbs, Hellig Olav, Copenhagen
FLOOR—1,840 lbs, United States, Larvik
PARAFFIN—10,120 lbs, Martinique, Puerto Colombia
26,759 lbs, United States, Reval
22,300 lbs, United States, Larvik
56,664 lbs, Silverash, Shanghai
4,433 lbs, Silverash, Kobe
28,275 lbs, Bristol City, Bristol
664,900 lbs, Vestalia, Buenos Aires
11,872 lbs, Cubano, Rio de Janeiro
51,250 lbs, Norefjord, Oslo
247,875 lbs, Minnesota, London
21,905 lbs, Presidente Wilson, Bari
11,250 lbs, West Eldara, Antwerp
8,080 lbs, Toloa, Puntarenas
61,210 lbs, Presidente Wilson, Palermo
11,151 lbs, Hellig Olav, Oslo
22,475 lbs, Toronto, Hongkong
178,762 lbs, Chicago City, Bristol
PARAFFIN, CRUDE—24,110 lbs, Bristol City, Bristol
PARAFFIN, LIQUID—4,476 lbs, Reliance, Hamburg
ZINC DUST—2,112 lbs, Zarembo, Secondee
OXIDE—64,010 lbs, Minnesota, London
24,400 lbs, West Eldara, Antwerp
16,118 lbs, Maine, Vancouver
2,112 lbs, Zarembo, Secondee
12,931 lbs, United States, Helsingfors
26,019 lbs, United States, Frelleborg
16,112 lbs, Bristol City, Bristol
49,040 lbs, Cameronia, Glasgow
12,060 lbs, Vandijk, Buenos Aires
49,040 lbs, Celtic, Liverpool
38,951 lbs, Hellig Olav, Uleaborg
26,019 lbs, Hellig Olav, Halmstadt

Clearance Dates

Adrastus, August 30
Amapala, August 30
Antilla, August 30
Barbara, August 30
Berengaria, August 28
Bermuda, August 9
Bermuda, August 31
Bristol City, September 4
Brpyere, August 15
Cameronia, August 24
Carabobo, August 8
Catatumbo, September 13
Celtic, August 10
Chicago City, August 21
Coamo, August 16
Corner Brook, August 24
Cubano, August 8
De Grasse, August 29
Dominica, August 15
Drottningholm, August 24
Eberstein, August 24
Eurana, August 18
Evangeline, September 6
Fort Victoria, September 4
Flora, August 29
France, August 24
Franconia, August 24
Harold Walker, September 10
Hellig Olav, August 31
Independence Hall, August 28
Iriona, August 31
Janet, September 6
Lancastria, August 24
Le Gigau, August 31
Leviathan, August 25
Maine, September 1
Majestic, August 22
Maravi, August 17
Martinique, August 7
Mayaro, August 13
Minnesota, August 17
Minnetonka, August 24
Nawal, September 7
Nordbo, August 30
Norden, August 24
Norefjord, August 14
Orizaba, August 24
Pacific, August 31
Pan-America, August 10
Paris, August 31
Pennland, August 10
Presidente Wilson, August 6
Reinbeck, August 24
Reliance, August 24
Rigel, August 14
R W Stewart, September 10
Silverash, July 27
Silvia, August 23
Schodack, August 22
Scythia, August 17
Stadsdijk, August 10
Terne, August 24
Tijuca, August 17
Toronto, August 10
United States, August 24
Utilla, September 7
Vandijk, August 17
Vestalia, August 17
Viborg, August 24
West Eldara, August 14
West Humhaw, August 23
West Isleta, July 28
Yoro, August 30
Zarembo, August 16
Zoroaster, September 5

Exports from Baltimore

AMMONIA—12 cyls, 4,594 lbs, Laurel Park, Maracaibo
SULPHATE—500 bgs, 46 tons, Munisla, Havana
39,200 bgs, 2,431 tons, City of Perth, Iloilo
ASPHALT — 35 dms, 16,331 lbs, Carenco, Genoa
1,094 dms, 546,673 lbs, Hannover, Hamburg
BARK—6 bls, 1,253 lbs, Waukegan, Paris
BITUMEN—480 dms, 100 tons, Hoxie, Glasgow
CALCIUM CARBIDE—24 dms, 3,024 lbs, Laurel Park, Maracaibo
CHLORIDE—25 dms, 9,925 lbs, Laurel Park, Maracaibo
CEMENT, ASBESTOS—18 pkgs, 2,210 lbs, Laurel Park, Maracaibo
FINISHER—300 dms, 1,500 gls, Laurel Park, Maracaibo
CHEMICALS—1 bx, 591 lbs, Munisla, Havana
CLAY, FIRE—3 dms, 1 ton, Laurel Park, Maracaibo
CORK DISCS—120 bgs, 25,854 lbs, Missouri, London
ENAMEL—6 bxs, 36 gls, Laurel Park, Maracaibo
EXTRACT, DYEWOOD—2 bxs, 110 lbs, Hannover, Hamburg
LOGWOOD—50 cks, 5,500 lbs, Glasgow, Kobe
QUERCITRON BARK—30 bbls, 15,837 lbs, Davisian, Liverpool
GRAPHITE—2 bxs, 48 lbs, Laurel Park, Maracaibo
GREASE, LUBRICATING—124 pkgs, 3,600 lbs, Laurel Park, Maracaibo
40 bxs, 1,860 lbs, City of Perth, Iloilo
INSECTICIDE—11 cs, 2,198 lbs, Munisla, Havana
4 bxs, 489 lbs, Munisla, Havana
LEAD, RED—40 dms, 4,203 lbs, Laurel Park, Maracaibo
MEDICINAL PREPS—340 cs, 2,827½ lbs, Missouri, London
OIL, CYLINDER—55 bbls, 2,772 gls, Carenco, Genoa
80 bbls, 3,360 gls, Waukegan, Havre
147 bbls, 7,350 gls, Hoxie, Glasgow
109 bbls, 5,600 gls, Davisian, Liverpool
65 bbls, 3,318 gls, Davisian, London
65 dms, 3,318 gls, Davisian, London
LUBRICATING—44 pkgs, 511 gls, Laurel Park, Maracaibo
30 dms, 39 gls, Munisla, Havana
65 bbls, 3,366 gls, Davisian, Manchester
PAINT—64 cs, 385 gls, Munisla, Havana
POLISH, METAL—100 cs, 3,744 lbs, Munisla, Havana
ROOT, SASSAFRAS—26 bgs, 1,824 lbs, Jeannette Skinner, Hamburg
SCOURING COMPOUND—100 cs, 4,860 lbs, Hoxie, Dublin
SOAP POWDER—220 cs, 9,900 lbs, Munisla, Havana
10 kegs, 2,000 lbs, Missouri, London
SODA ASH—500 bgs, 150,500 lbs, Munisla, Havana
25 bbls, 13,659 lbs, Munisla, Havana
SPICES—2 dms, 223 lbs, Munisla, Havana
2 cs, 22 lbs, Munisla, Havana
STARCH, CORN—880 bgs, 124,080 lbs, Missouri, London
880 bgs, 124,080 lbs, Hoxie, Glasgow
PEARL—400 bgs, 56,000 lbs, Munisla, Havana
VARNISH—4 bxs, 48 gls, Laurel Park, Maracaibo
WAX—80 bbls, 22,723 lbs, Larenco, Carenco, Naples
PARAFFIN—194 bbls, 61,547 lbs, Hoxie, Dublin
769 bbls, 224,443 lbs, Davisian, Liverpool
583 bbls, 158,219 lbs, Hoxie, Glasgow

Exports from Baton Rouge

NAPHTHA—6,100 bbls, Conrad Mohr, Bergen
17,400 bbls, Den Haag, Amsterdam
PETROLEUM, REFD—38,000 bbls, Conrad Mohr, Bergen
67,000 bbls, Den Haag, Amsterdam

Clearance Dates

Den Haag, August 27
Conrad Mohr, August 29

Exports from Beaumont

GASOLINE—520 tons, Elsa, Antwerp

Clearance Date

Elsa, September 1

F. PAUL WEISS
President

Cable Address
FORWEISS, N. Y.

R. LEAKE
Treasurer

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Exports from Boston

BAKING POWDER—8 crts, 50 bxs, 2,280 lbs, Nova Scotia, St Johns
BRONZE DUST—1 cs, 98 lbs, Nova Scotia, Liverpool
CEMENT, CAN—1 dm, 405 lbs, San Benito, Havana
10 dms, 4,407 lbs, The Angeles, Rosario
PASTE—1 cs, 63 lbs, Lehigh, London
1 cs, 63 lbs, Laconia, Liverpool
RUBBER—3 bbls, 900 lbs, San Benito, Havana
CLAY—150 bbls, 40,000 lbs, Winona County, Manchester
DISINFECTANT—10 dms, 5,113 lbs, San Benito, Havana
1 can, 10 gls, Lehigh, London
DRESSING, LEATHER—3 bxs, 100 lbs, Lehigh, London
1 cs, 37½ gls, Lehigh, London
2 kgs, 2 bxs, 3 bbls, 1,010 lbs, Lorain, Hamburg
1 cs, 12 kgs, 1,238 lbs, Winona County, Manchester
SHOE—8 cs, 375 lbs, San Benito, Havana
11 bbls, 530 gls, Laconia, Liverpool
DRILLING PASTE—12 cs, 900 lbs, Nova Scotia, Liverpool
DRUGGISTS' SUNDRIES—32 cs, 2,408 lbs, San Benito, Havana
6 bls, 1,745 lbs, The Angeles, Buenos Aires
FINISH, SHOE—10 bbls, 4,250 lbs, Laconia, Liverpool
2 bbls, 928 lbs, Nova Scotia, Liverpool
FISH MEAL—1,050 bgs, 115,500 lbs, Lorain, Hamburg
GLUE—86 kgs, 6 cs, 8,186 lbs, Lorain, Hamburg
FISH—2 bbls, 1,240 lbs, Lorain, Bremen
GREASE, ANIMAL—88 dms, 34,996 lbs, San Benito, Havana
HAIR, HOG—30 bls, 8,582 lbs, Lehigh, London
INK, PRINTING—30 dms, 4,533 lbs, Coahoma County, Antwerp
KEROSENE—2 bbls, 109 gls, Yarmouth, Yarmouth
LARD—15,000 bxs, 250 hlf bbls, 150 tcs, 1,009,618 lbs, Lorain, Hamburg
700 bxs, 200 tcs, 114,689 lbs, Nova Scotia, Liverpool
LEATHER SOFTENER—4 dms, 1,498 lbs, The Angeles, Buenos Aires
MEDICINAL PREPS—1,920 bxs, 34,040 lbs, Lehigh, London
20 cs, 1,360 lbs, San Benito, Havana
20 cs, 2,640 lbs, San Benito, Havana
OIL, GEAR—1 qr bbl, 13 gls, Prince Arthur, St John, N B
LUBRICATING—1 bbl, 230 lbs, San Benito, Havana
1 cs, 3 gls, Nova Scotia, St Johns
OLEO—10 bbls, 3,963 lbs, San Benito, Havana
180 bbls, 95 kgs, 80,600 lbs, Lorain, Hamburg
SEWING MACHINE—2 cs, 5½ gls, Nova Scotia, St Johns
SPERM—1 bbl, 55 gls, Yarmouth, Yarmouth
PAINT—3 dms, 150 lbs, Yarmouth, Yarmouth
PASTE—2 kgs, 160 lbs, Nova Scotia, St Johns
ADHESIVE—12 pails, 593 lbs, Lehigh, London
PITCH, SHOE—1 cs, 60 lbs, Winona County, Manchester
POTASH CHLORATE—1 bx, 2 lbs, Lorain, Hamburg
SOAP—3 cs, 258 lbs, Nova Scotia, Liverpool
WASHING COMPOUND—45 cs, 1,353 lbs, Yarmouth, Yarmouth
POWDER—50 cs, 2,800 lbs, Nova Scotia, St Johns
WAX, LIQUID—1 bx, Laconia, Liverpool
SEALING—1 cs, 238 lbs, San Benito, Havana
STITCHING—1 cs, 48 lbs, Nova Scotia, St Johns

Clearance Dates

Coahoma County, September 1
Laconia, September 2
Lehigh, August 28
Lorain, August 28
Nova Scotia, September 1
Prince Arthur, September 4
San Benito, August 29
The Angeles, August 31
Winona County, August 31
Yarmouth, September 4

Exports from Corpus Christi

OILCAKE, COTTONSEED—200 tons, Nord Schleswig, Hamburg

Clearance Date

Nord Schleswig, August 30

Exports from Galveston

ASPHALT—1,255 bgs, Maryland, Havre
BLACK, CARBON—3 tons, West Camak, Antwerp
CONCENTRATES—50 tons, West Camak, Antwerp
SULPHUR—2,750 tons, Monfiore, Marseilles
1,400 tons, Orion, Chandler
2,200 tons, Orion, Quebec
8,500 tons, Kersten Niles, Harburg
3,000 tons, Kilnsea, Three Rivers
900 tons, Point Reyes, Tacoma
700 tons, Point Reyes, Port Angeles
4,900 tons, Kilnsea, Montreal

Clearance Dates

El Valle, September 1
Kernsten Miles, August 31
Kilnsea, September 4
Maryland, August 31
Monflore, August 31
Orion, August 31
Point Reyes, September 4
West Camak, August 31

Exports from Houston

BLACK, CARBON—400 cs, Colorado Springs, Manchester
175 cs, Teresa Odero, Genoa
GASOLINE—66,756 bbls, W H Tilford, Havana
40,000 bbls, Petroleine, Rouen
64,000 bbls, Paludina, United Kingdom
55,000 bbls, Thalia, Copenhagen
5,500 tons, Luminous, Bilbao
80,000 bbls, Birkenhead, United Kingdom
34,000 bbls, Polarine, Wilmington
KEROSENE—11,000 bbls, Polarine, Wilmington
7,000 bbls, Petroleine, Rouen
700 tons, Luminous, Bilbao
OIL, FUEL—83,641 bbls, Gedania, Southampton
58,000 bbls, Invergordon, United Kingdom
GAS—52,874 bbls, Housatonia, Avonmouth
4,000 bbls, Polarine, Wilmington
46,000 bbls, Thalia, Copenhagen
ILLUMINATING—19,619 bbls, Vilga, Avonmouth
OILCAKE, COTTONSEED—700 tons, Tampa, Copenhagen
1,000 tons, Gorm, Aalborg
50 tons, Tampa, Helsingfors
OILMEAL, COTTONSEED—100 tons, Tampa, Oslo
SULPHUR—2,149 bgs, Colorado Sprngs, Glasgow

Clearance Dates

Birkenhead, September 5
Colorado Springs, August 31
Gedania, August 31
Invergordon, August 31
Housatonia, August 26
Luminous, September 2
Pauldina, September 4
Petroleine, September 2
Polarine, September 1
Tampa, September 4
Teresa Odero, September 1
Thalia, September 4
Vilga, August 29
W H Tilford, August 29

Exports from Los Angeles

ACID, BORIC—51 bgs, 11,245 lbs, President Wilson, Yokohama
500 bgs, 56,500 lbs, Indiana, Havre
ASPHALT, LIQUID—5 tons, Wairuma, New Plymouth
PAVING—485 tons, Golden Peak, Manila
PETROLEUM—5 tons, Wairuma, New Plymouth
1,300 long tons, Golden Kauri, Melbourne
23 tons, Carriso, Nukualfa
1,000 long tons, Yngaren, Adelaide
BORAX—2,000 bgs, 226,000 lbs, Zenon, Havre
800 bgs, 91,088 lbs, La Plata, Tokyo
102 bgs, 22,491 lbs, President Wilson, Kobe
1,398 bgs, 313,946 lbs, President Wilson, Shanghai
1,500 bgs, 169,500 lbs, Indiana, Havre
GASOLINE—54,938 bbls, Vanduara, Balboa
42,266 bbls, Warwick, Ioco
1,191 bbls, Shelton, Dairen
255 bbls, Cathwood, Balboa
483 bbls, Childar, San Jose
180 bbls, Childar, Buenaventura
614 bbls, Childar, Punta Arenas
476 bbls, Childar, Tocopilla
952 bbls, Childar, Antofogasta
476 bbls, Childar, Iquique
3 bbls, La Placentia, Chile
714 bbls, Golden Peak, Manila
23 bbls, Golden Peak, Bangkok
6 bbls, Washington, Mazatlan
6 bbls, Washington, San Jose
65 bbls, Jeannette, Ensenada
1,099 bbls, Yngaren, Melbourne
108¾ bbls, Carriso, Nukualfa
169¾ bbls, Carriso, Vavan Tonga
12 bbls, Carriso, Pago Pago
4 bbls, Carriso, Apia
664 bbls, Wairuma, New Plymouth
692 bbls, Wairuma, Lyttleton
1,232 bbls, Wairuma, Papeete
115 bbls, Golden Kauri, Melbourne
86,408 bbls, W S Rheem, London
21,000 bbls, W S Rheem, Hull
81,579 bbls, British Governor, London
100,544 bbls, Clio, Hamburg
GREASE, LUBRICATING—2,750 lbs, Ecuador, Havana
1,800 lbs, Cathwood, Balboa
1,140 lbs, Point Judith, Barranquilla
KEROSENE—238 bbls, Washington, Topolobampo
119 bbls, Yngaren, Brisbane
103 bbls, Yngaren, Sydney
343 bbls, Yngaren, Melbourne
154 bbls, Yngaren, Australia ports
191¼ bbls, Carriso, Nukualfa
152¼ bbls, Carriso, Vavan Tonga
29 bbls, Carriso, Pago Pago
84 bbls, Carriso, Apia
120 bbls, Wairuma, Auckland
17 bbls, Wairuma, Dunedin
178 bbls, Wairuma, New Plymouth
19 bbls, Wairuma, Lyttleton
439 bbls, Wairuma, Papeete
47 bbls, Golden Kauri, Newcastle
57 bbls, Golden Kauri, Melbourne
34 bbls, Golden Kauri, Sydney
3,572 bbls, Shelton, Tsingtao
3,572 bbls, Shelton, Dairen
3,572 bbls, Shelton, Chefoo
24 bbls, Ecuador, Mazatlan
370 bbls, Cathwood, Balboa
357 bbls, Silverelm, Belawan
24 bbls, Childar, Punta Arenas
258 bbls, Childar, Tocopilla
476 bbls, Childar, Antofogasta
357 bbls, Childar, Iquique
7 bbls, La Placentia, Chile
4,762 bbls, Golden Peak, Foochow
4,762 bbls, Golden Peak, Amoy
1,552 bbls, Golden Peak, Manila
MOTOR SPIRIT—1,978 bbls, Yngaren, Melbourne
1,776 bbls, Yngaren, Sydney
2,343 bbls, Yngaren, Adelaide
685 bbls, Yngaren, Australia
115 bbls, Wairuma, Dunedin
240 bbls, Wairuma, Auckland
463 bbls, Golden Kauri, Newcastle
531 bbls, Golden Kauri, Melbourne
NAPHTHA—1,455 bbls, Warwick, Ioco
OIL, COCONUT—20 bbls, 9,311 lbs, Washington, Mazatlan
DIESEL—6,688 bbls, Richmond, Ketchikan
13,424 bbls, Nora, Balboa
DISTILLATE—1 bbl, President Jefferson, Kobe
FUEL—6,000 bbls, Texada, Port Alice
50,614 bbls, Crenatula, Yokohama
42,442 bbls, Caliche, Tocopilla
35,208 bbls, Richmond, Ketchikan
76,675 bbls, Nora, Balboa
61,697 bbls, Winifred O'Donnell, Manila
41,700 bbls, Satanta, Hankow
43,635 bbls, Chiloil, Chanaral
23,800 bbls, Argyll, Santa Rosalia
63,579 bbls, Dilworth, Balboa
68,364 bbls, Robert E Hopkins, Honolulu
62,615 bbls, W S Miller, Buenos Aires
73,519 bbls, Utacarbon, Cristobal
59,104 bbls, Scottish Strath, Buenos Aires
87 bbls, Jeannette, Ensenada
LUBRICATING—1¼ bbls, Golden Kauri, Melbourne
26 bbls, Point Judith, Barranquilla
15 bbls, Presdent Jefferson, Kobe
5 bbls, Wairuma, Papeete
61 bbls, Golden Kauri, Sydney
49 bbls, Ecuador, Havana
5 bbls, Ecuador, Mazatlan
260 bbls, Cathwood, Balboa
18 bbls, Washington, Mazatlan
7 bbls, Jeannette, Ensenada
33 bbls, Yngaren, Sydney
½ bbl, Carriso, Nukualfa
½ bbl, Carriso, Vavan Tonga
PETROLEUM, CRUDE—1 bbl, President Jefferson, Kobe
73 bbls, President Jefferson, Yokohama
MINERAL SPIRITS—22 bbls, Wairuma, Dunedin
4 bbls, Wairuma, Lyttleton
8 bbls, Wairuma, Auckland
10 bbls, Yngaren, Melbourne
SODA ASH—1,668 bgs, 253,536 lbs, Quinault. Vancouver

Clearance Dates

Argyll, August 29
British Governor, August 31
Caliche, August 27
Cathwood, August 24
Carriso, August 23
Childar, August 28
Chiloil, August 28
Clio, August 31
Crenatula, August 26
Dilworth, September 1
Ecuador, August 13
Golden Peak, August 23
Golden Kauri, August 20
Robert E Hopkins, September 1
Jeannette, August 30
La Placentia, August 23
W S Miller, August 30
Nora, August 27
Winifred O'Donnell, August 27
Point Judith, August 10
President Jefferson, August 13
W S Rheem, August 26
Richmond, August 27
Satanta, August 28
Scottish Strath, September 1
Shelton, August 15
Silverelm, August 1 8
Texada, August 24
Utacarbon, August 31
Vanduara, August 27
Wairuma, August 16
Warwick, September 1
Washington, August 23
Yngaren, August 24

Exports from Mobile

ROSIN—80 bbls, William, Santos, Domingo City.

Clearance Date

William, September 4

Exports from New Orleans

ASPHALT—220 bgs, Braheholm, Oslo
744 bgs, West Chetac, Hamburg
545 bgs, Polybius, London
BLACK, CARBON—1,057 cs, Statesman, Liverpool
10 cs, Braheholm, Copenhagen
50 cs, Coldbrook, Havre
115 cs, Coldbrook, Antwerp
36 cs, Coldbrook, Ghent
35 cs, Scantic, Genoa
80 cs, Monginevro, Genoa
150 cs, Santos, Yokohama
175 cs, Santos, Kobe
1,328 cs, Kentucky, Havre
150 cs, Kentucky, Antwerp
152 cs, Tampa, Oslo
100 cs, Tampa, Copenhagen
296 cs, Polybius, London
45 cs, Polybius, Hull
70 cs, West Ivis, Glasgow
DISTILLATE—105 dms, Nicarao, Puerto Cortez
EARTH, FULLER'S—9,600 bgs, Steinstad, Puerto Mexico
GILSONITE—200 bgs, West Chetac, Hamburg
109 sx, Coldbrook, Havre
GASOLINE—18 dms, 20 cs, Norma, Santiago
300 cs, Gatun, Celba
155 cs, 64 dms, Managua, Bluefields
2,693,844 gls, El Ciervo, Bergen
48 dms, Imperator, Bluefields
GLUCOSE—120 bbls, West Ivis, Dublin
540 bbls, Polybius, London
60 bbls, Parismina, Havana
INSECTICIDE, AGRICULTURAL—55 dms, Polybius, London
KEROSENE—56 cs, Dictator, Bluefields
150 cs, Tela, Puerto Barrios
460 cs, Norma, Kingston
79 cs, Gatun, Ceiba
75 cs, 50 dms, Nicarao, Puerto Cortez
150 cs, Managua, Bluefields
LIME ACETATE—1,502 bgs, Santos, Yokohama
1,391 bgs, Santos, Kobe
NAPHTHA—47,527 bbls, British Colony, Arzew and Cette
OIL, FUEL—42,000 bbls, Norman Bridge, Tampa
OIL, LUBRICATING—513 bbls, Statesman, Liverpool
100 bbls, Statesman, Manchester
175 bbls, Braheholm, Gothenburg
68 bbls, Braheholm, Copenhagen
866 bbls, West Chetac, Hamburg
150 bbls, Coldbrook, Havre
2,028 bbls, Coldbrook, Antwerp
94 dms, 82 cs, Norma, Santiago
8 dms, Gatun, Ceiba
15 bbls, Gorm, Copenhagen
58 bbls, 8 dms, Nicarao, Puerto Cortez
10 bbls, Managua, Bluefields
267 bbls, Manginevro, Genoa
30 bbls, Manginevro, Naples
255 bbls, 250 dms, Santos, Yokohama
55 bbls, 118 dms, Santos, Kobe
1,300 bbls, Kentucky, Havre
65 bbls, Kentucky, Dunkirk
770 bbls, West Ivis, Glasgow
65 bbls, West Ivis, Dublin
590 dms, Steinstad, Puerto Mexico
152 cs, Tampa, Oslo
100 cs, Tampa, Copenhagen
1,694 bbls, Polybius, London
752 bbls, Polybius, Hull
200 bbls, Kentucky, Antwerp
PINE—3 dms, Braheholm, Oslo
REFINED—20 cs, 15 dms, Managua, Cienfuegos
PETROLEUM, REFD—29,749 bbls, British Colony, Arzew and Cette
PAINT—150 bbls, West Ivis, Glasgow
150 bbls, Polybius, London
150 bbls, Polybius, Hull
429 bxs, Parismina, Havana
ROSIN—50 bbls, Statesman, Liverpool
50 bbls, West Chetac, Rotterdam
25 bbls, Halse, La Guavra
80 bbls, Commodore Rollins, Barraquilla
125 bbls, Halse, Puerto Colombia
20 bbls, Santos, Kobe
195 bbls, Tampa, Oslo
400 bbls, Scantic, Genoa
250 bbls, West Ivis, Glasgow
SOAP—60 cs, Norma, Kingston
200 cs, Managua, Bluefields
500 bbls, West Ivis, Glasgow
TAR, PINE—8 dms, Polybius, London
TRIPOLI—30 tons, Braheholm, Gothenburg
WAX—341 bbls, West Chetac, Hamburg
600 sx, Commodore Rollins, Barranquilla
3,364 bbls, Puerto Colombia
201 sx, Monginevro, Genoa
507 bbls, 642 bgs, Santos, Kobe
1,220 bgs, Kentucky, Antwerp
2,266 bbls, Polybius, London
712 bgs, Scantic, Genoa
712 bgs, Scantic, Naples
22,400 bbls, West Ivis, Glasgow
560 bbls, 968 bgs, West Ivis, Dublin
40 bbls, West Ivis, Avonmouth
431 sx, Steinstad, Puerto Mexico

Clearance Dates

Braheholm, September 5
British Colony, August 30
Coldbrook, August 27
Commodore Rollins, August 24
Creole, September 4
Dictator, September 6
El Ciervo, September 1
Gatun, September 7
Gorm, September 1
Halse, August 25
Imperator, August 30
Jose, September 7
Managua, August 31
Nicarcao, August 31
Norma, August 30
Norman Bridge, September 8
Parismina, August 31
Point Gorda, September 5
Polybius, August 23
Santos, September 1
Scandia, August 29
Scantic, August 30
Statesman, September 5
Steinstad, August 31
Tampa, August 27
Tela, August 30
West Chetac, August 25
West Ivis, August 29

Exports from Norfolk

EARTH, FULLER'S—206,000 lbs, Lehigh, Hull
EXTRACT, TANNING—89,739 lbs, Davisian, Liverpool
22,500 lbs, Missouri, London
GENTRIN—62,480 lbs, Artigas, Manchester
MICA, GROUND—10,100 lbs, Davisian, Manchester
OCHER—33,637 lbs, Lehigh, Hull
ROOTS AND HERBS—172 lbs, Lehigh, London
2,200 lbs, Sac City, Basle, Switzerland
STARCH, CORN—454,280 lbs, Davisian, Manchester
440 bgs, 62,040 lbs, Lehigh, Hull
3,000 cs, 158,000 lbs, Sac City, Antwerp
SULPHUR DIOXIDE—1,350 lbs, Kolsnaren, Copenhagen

Exports from Pensacola

ROSIN—200 bbls, Maiden Creek, Liverpool
GUM—300 bbls, Maiden Creek, Manchester
WOOD—800 bbls, Maiden Creek, Manchester

Clearance Date

Maiden Creek, September 5

Exports from Philadelphia

ALCOHOL—1 bx, London Mariner, London
AMMONIA SULPHATE—3,360 bgs, Steel Navigator, San Carlos
4,595 bgs, Steel Navigator, Cheribon
11,488 bgs, Steel Navigator, Sourabaya
11,488 bgs, Steel Navigator, Samarang
9,235 bgs, Steel Navigator, Belawan
CHEMICALS—1 bx, City of Newcastle, Calcutta
GASOLINE—700 bbls, Ayuroca, Rio Grande
15,000 cs, Ayuruoca, Santos
1,000 cs, City of Athens, Cape Town
2,000 cs, City of Athens, Port Elizabeth
2,600 cs, City of Athens, East London
3,500 cs, City of Athens, Durban
6,500 cs, City of Athens, Lourenco Marques
10,000 cs, City of Athens, Beira
3,500 cs, Jvazeiro, Rio Janeiro
5,000 cs, Jvazeiro, Bahia
GUM, MYRRH—10 bls, Executive, Marseilles
KEROSENE—10,000 cs, Ayurocca, Santos
8,000 cs, Jvazeiro, Rio Janeiro
2,000 cs, Jvazeiro, Bahia
MEDICINAL PREPS—3 cs, Steel Navigator, Manila
OIL, COMPOUND—5 bbls, Vincent, Havre
CYLINDER—413 bbls, London Mariner, London
ILLUMINATING—1,400 cs, City of Athens, Cape Town
6,500 cs, City of Athens, Port Elizabeth
3,800 cs, City of Athens, East London
1,900 cs, City of Athens, Durban
10,000 cs, City of Athens, Lourenco Marques
5,000 cs, City of Athens, Beira
5,738 bbls, in bulk, Winnebago, London
ENGINE—455 dms, City of Newcastle, Calcutta
GAS—300 cs, Ayuruoca, Santos
MINERAL—50 cs, City of Athens, Lourenco Marques
1 cs, Steel Navigator, Honolulu
30 dms, Vincent, Havre
202 bbls, Vincent, Havre
30 dms, Vincent, Dunkirk
100 bbls, Vincent, Dunkirk
NEATSFOOT—16 dms, Trafalgar, Santiago Chile
6 dms, Trafalgar, Talcahuano
30 bbls, Hudson Bordeaux, Havre and Dunkirk
15 dms, Executive, Genoa
OLEO—200 tres, Havelland, Bremen and Hamburg
TRANSFORMER—10 dms, Jvazeiro, Rio Janeiro
10 cs, Jvazeiro, Rio Janeiro
5 cs, City of Newcastle, Bombay
3 cs, City of Newcastle, Karachi
16 dms, City of Newcastle, Calcutta
3 cs, City of Newcastle, Calcutta
OILCAKE, LINSEED—8,820 bgs, Gaasterdijk, Rotterdam
5,513 bgs, Mercer, Rotterdam
PETROLEUM—150 dms, Havelland, Bremen and Hamburg
SODA, CAUSTIC—50 cs, Trafalgar, Santiago Chile
SILVER ALBUMINATE—3 cs, London Mariner, London
TURPENTINE, SUBSTITUTE—2,000 cs, Ayuruoca, Santos
15 cs, City of Athens, Cape Town
425 cs, City of Athens, Durban
25 cs, City of Athens, Lourenco Marques
VARNISH, INSULATING—50 dms, Lorain, Hamburg
WAX, PARAFFIN, REFD—400 bgs, Trafalgar, La Pai
103 bgs, Ayuruoca, Rio Grande
1,524 bgs, Lorain, Hamburg
210 bbls, Lorain, Hamburg
254 bgs, Havelland, Hamburg and Bremen
100 cs, Jvazeiro, Rio Janeiro
1,230 bgs, Isarco, Palermo
15 bgs, Isarco, Leghorn
1 cs, Executive, Genoa
250 bgs, Executive, Naples
2,501 bgs, Mercer, Rotterdam
PARAFFIN, UNREFD—254 bgs, Havelland, Hamburg and Bremen
840 bbls, Havelland, Hamburg and Bremen
254 bgs, Mercer, Rotterdam
630 bols, Mercer, Rotterdam

Exports from Port Arthur

ASPHALT—1,026 bbls, Eclipse, Yokohama
182 bbls, Eclipse, Moje
5 dms, Eclipse, Manila
GASOLINE—24,098 cs, Eclipse, Manila
13,000 bbls, Eclipse, Legaspi
19,606 bbls, British Endeavor, Durban
33,900 bbls, Papoose, Stockholm
20,000 bbls, Papoose, Malmo
1,000 cs, Afel, Montevideo
3,400 cs, Afel, La Plata
23,027 cs, Afel, Rosario
GREASE, LUBRICATING—25 cs, Eclipse, Osaka
50 bbls, Eclipse, Yokohama
20 dms, 25 bbls, Eclipse, Kobe
30 dms, 10 kgs, 80 cs, Afel, Montevideo
50 cs, 10 hf bbls, 35 dms, Afel, Rosario
KEROSENE—11,000 cs, Eclipse, Manila
7,000 cs, Legaspi
8,000 cs, Papoose, Malmo
30,000 cs, Afel, Montevideo
5,000 bbls, 300 dms, Afel, La Plata
3,000 cs, Afel, Rosario
OIL, LUBRICATING—335 dms, 25 bbls, 400 cs, Eclipse, Kobe
60 dms, 35 cs, Eclipse, Yokohama
200 dms, Eclipse, Kobe
998 dms, 95 cs, Eclipse, Manila
1,171 cs, 293 dms, Afel, Montevideo

(Continued on page 32)

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Carbonate — Nitrate
Chloride — Resinate
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THE products of the Carbide and Carbon Chemicals Corporation are applicable to a wide variety of industries and most of them are new from the standpoint of commercial availability. Naturally enough, therefore, many interesting articles have appeared in the literature descriptive of some particular product or some new and important use. We present herewith a list of the more important papers and will be pleased to send you reprints of any that may be of interest. Please use the coupon below.

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5. Chemical Treatments for Controlling the Growth of Buds of Plants—*F. E. Denny*
6. Importance of Temperatures in the use of Chemicals for Hastening the Sprouting of Dormant Potato Tubers—*American Journal of Botany—June*, 1928, *Vol.* 15, *pp.* 395-404.

FOR STORAGE WAREHOUSEMEN AND FUMIGATORS

1. Ethylene Dichloride-Carbon Tetrachloride Mixture: A New, Non-Burnable, Non-Explosive Fumigant—*By R. T. Cotton and R. C. Roark*
2. Some Fumigation Tests with Ethylene Dichloride-Carbon Tetrachloride Mixture—*By L. F. Hoyt*
3. Ethylene Oxide as a Fumigant—*By R. T. Cotton and R. C. Roark*

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Published every Monday by Oil, Paint and Drug Reporter, Inc., 12 Gold Street, New York; Telephone, John 2357; Cable Address, Reporter, N. Y.
Harry J. Schnell, President and Treasurer; Frank V. Baldwin, Vice-President; Daniel G. Bogert, Secretary.

Closing Dates—Display advertisements, Thursday noon; classified advertisements, Friday noon.
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Subscription Price per Year: United States, $5; Canada, $7; other foreign countries, $10; payable in advance.
Address all communications to, and make all remittances payable to Oil, Paint and Drug Reporter, Inc.

Vol. 114: No. 12 MONDAY, SEPTEMBER 17, 1928 12 Gold Street, New York

Chemistry and Industry

Another, and an important, step has been taken toward the desirable cultivation of close relations and better mutual understanding between the chemist and the industrialist whom he serves. At its Fall meeting at Swampscott, last week, the American Chemical Society in its division of industrial and engineering chemistry heard addresses by executives of a number of large chemical concerns, who had a message for the scientific side of the greater chemical industry of the country with respect to the economic status of nitrogen. This message was well received. It was, unquestionably, an important one. But, the greater significance of the occasion was its evident effect in arousing an interest in further similar efforts to give the chemist an insight into the broader aspects of the work in which he is engaged.

It cannot be denied that the chemist serves industry most essentially. Progress in industry owes, at least, as much to the scientific influence as to any other. It cannot be denied that the chemist, conversely, owes much to industry for its incentive to research, for its support of scientific endeavors, for its employment of scientific workers. Logically and obviously, the two parties to such an intimate and interdependent relationship should be fully informed relative to each other's point of view as well as requirements and possibilities. Acquaintance is the best help toward satisfactory service in any field of human relations.

The advantages of a closer and better informed relationship between chemistry and industry has been set forth in these columns on numerous occasions. It has been and is the belief of the Oil, Paint and Drug Reporter that both sides have been somewhat negligent in this matter. Much, if not most, of the really valuable information that is contributed at meetings of the American Chemical Society has been lost to the industrialists to whom it is of most importance. It is likewise true that chemists, whose work is intimately connected with the progress of an industry, do not get a satisfactory or adequate share of the useful information that is presented at meetings of trade associations. The reports and discussions at the meetings of manufacturers of paint, rubber, fertilizers, paper, dyes, textiles, insecticides, glass, or any one of the many other lines of industrial products which are largely chemical in composition or in process offer much that the chemist should know, but seldom does. In fact, he is woefully lacking in the information that is offered in the meetings of manufacturers of chemicals.

Particularly is it desirable that the chemist should know all that it is possible for him to learn about the economics of the manufacture and utilization of chemicals. His interest naturally centers, as far as yields go, in the returns from a given process and its approach to the theoretical. He should know the relation of manufacturing capacity to the needs of consumption as well, at least, as he has come to know the importance of avoiding waste and of utilizing such waste products as cannot be avoided.

There are big problems in economics in the chemical industry today, in all its many branches. The revolutionary changes to new raw materials is a matter of universal importance. The application of old products to new uses is equally important. The necessity for volume production for the sake of economy has not yet become understood to the extent which it demands. The financing of organizations which are sufficiently large to be fully efficient is a problem of considerable magnitude. Distribution is one of the most important problems of the chemical industry, as it is of industry as a whole. All these things have a bearing on the efficiency and the satisfactoriness of the chemist's service to industry. In equal degree, the services of the chemist bear essentially on these problems. He may not now see it, but even in the development of more efficient distribution, the chemist can be of great service.

The lesson for the chemist to learn from information relative to the economic side of the chemical industry is one of direction. He should have full knowledge of the ends to which his efforts should be applied. Research has become so widely recognized as essential to industrial progress that it is a fetich with many. These seem to have lost sight of the real purpose of research and to have come to look upon it as something sufficient in itself. To be engaged in research is enough for these over-enthusiastic scientists; the practical value of that which they seek seems to have no significance for them. Research has been defined as the interrogating of nature. It should be restricted to logical and necessary questions. As the criterion of industrial success is economic efficiency, it follows that economics should be the guide of the industrial research worker. It is a waste of time, money, and skill to work blindly in the hope of chancing upon some promising result.

There was no discussion by the chemists who heard the addresses on the economic status of nitrogen. They must have been newly informed in learning that the supply of this important product will far exceed the enormous demands of consumption in less than a year. Perhaps, this information was enough. It was unquestionably authentic, even though at variance with the general opinion on the subject. Whether the absence of discussion was significant cannot be said. Doubtless there was, here and there, a thought that industry was a hard master, driving the chemist to a task and then calling him to account for doing the work too well. But, it must have been clear that it was, not an industrialist, but a scientist who, about the beginning of the present century, sounded a warning against the possibility of world starvation to result from an insufficiency of nitrogen for the maintenance of the productiveness of the soil. It was made clear that war, not industry, was the incentive to the great activity which brought the synthesis of nitrogen compounds to such large volume. Industry is an exacting master, it is true. But, it is careful of those who serve it. They have an opportunity to learn this. In deciding to discuss economic subjects at future meetings, the chemists have set out to make the most of their opportunity in this regard. Both they and the industries which they so ably serve will be the gainers.

Holding Back Petroleum

With the return from Europe, last week, of the president of the Standard Oil Company of New Jersey the restriction of the production of crude petroleum on a world-wide scale again became a subject of general interest. The Standard Oil official had discussed this matter abroad with executives of several of the other large petroleum companies of Europe and the United States. The conferences, in fact, represented the largest operators in practically all fields with the exception of Russia. No agreement has been reached, according to the returning Standard Oil official, but he did declare that "a better understanding of the world oil problem is in prospect."

The petroleum industry, in other countries as well as in the United States, has come to a realization of the importance of the economic side of its operations. It is one thing to know that competition among the larger producing organizations of the world could add greatly to the supply of this material. That has been common knowledge in the industry for some time. It is quite another thing to know that to permit such competition to lead to excessive production—and an excess is never far off nowadays—would do far more harm, in every sense, than good.

It is possible that the United States alone could produce enough crude petroleum to supply the world. How long such a volume of production could be maintained is largely a matter for conjecture. But, it must be realized that it would be economically unwise to attempt such a monopoly. It is possible that the oil fields of South America could produce at least half as much crude petroleum as is now produced in the world. Doubtless, they could produce it cheaply. But, the effect of such an addition to the present supply would not, in the long run, be good for the consumer any more than for the producer. Some temporary advantages would lie in any shifting of the proportions of production. The effects which this would produce in the depreciation of the property now producing and handling crude petroleum and its products, if inevitable, would be most detrimental for the future. Far better is it to proceed gradually with the introduction of supplementary supplies.

Any attempt to extend to the world such efforts to restrict the production of crude petroleum as are being successfully employed in Texas, Oklahoma, and California, would require agreement among interested operators less likely to be of accord than those in a State. Desirable as restriction may seem; necessary as it may be, it could

not be accomplished by the large producing companies alone. This problem of bringing all producers, large and small, to a realization of their common needs was faced in the producing regions of the United States where proration plans are now operative. It was not a simple problem in these cases. It would, naturally, be far more complicated with respect to world production. The large producers are few in number. Directly, or indirectly, they control the larger part of world production. But, their influence would fall short of satisfactory attainment. Conferences designed to interest at least the majority of producers in a curtailment program are planned. The task of satisfactorily allocating production will be no easy one. Action, to be successful, must be widespread. It must be undertaken voluntarily. There is some measure of hope for a successful outcome of the efforts to get together, but success is by no means assured.

Russia offers something of the nature of an unknown equation in the problem of worldwide restriction of the production of crude petroleum. The Soviet oil trust has completed plans for extensive expansion, particularly in Sakhalin. The resources of the fields in Sakhalin not conceded to the Japanese company some two years ago have not definitely been ascertained. It is generally reported from official sources in Russia that these fields and others in the neighborhood of Vladivostok are of great promise. A new agreement between the Soviet trust and the Japanese company operating in Sakhalin is looked to in Russia to add materially to the production in that country. Money for expanded operations is to be furnished by the Japanese. It is quite possible that the relations maintained at some difficulty between the Soviet trust and several American oil companies may be an important factor in the planning for worldwide restriction of production. In any event, Russia cannot long be counted out of such a plan.

I. G. Seeks Pay for Dye Patents from U. S.

Chemical Foundation Case Is Brought Up Again in New Dress

WASHINTON, Sept. 11, 1928.

The question of payment to German nationals for patents seized by the Alien Property Custodian at the outbreak of the war with Germany, sold to the Chemical Foundation, Inc., and subsequently licensed to the United States Navy, was given a preliminary hearing today before Judge Edwin B. Parker, the arbiter appointed by the President to pass on payments authorized by the settlement of war claims act of 1928.

The hearings, which opened yesterday, were the first to be held under the act, and the arbiter propounded a number of questions to be discussed by the interested parties, which must be decided by him in the course of his arbitration. Further hearings on the patents sold to the Chemical Foundation will be held September 25.

It is the first query of the arbiter that relates to the Chemical Foundation, and reads:—

It appears from the record in the case of the United States vs. the Chemical Foundation that the Alien Property Custodian sold and transferred to the Chemical Foundation more than 5,000 patents, and that the Chemical Foundation, as a part of the consideration moving the Alien Property Custodian to make such conveyances to it, granted to the government of the United States non-exclusive and non-assignable licenses to all of the patents which the Chemical Foundation acquired from the Alien Property Custodian. Do these licenses so acquired by the United States fall within the terms of the third paragraph of section 3 (b) of the act as patents licensed by the Alien Property Custodian to the United States?

I. G. Wants Reimbursement

This paragraph of the act of 1928 provides that the government shall reimburse the original German holders of patents seized by the Alien Property Custodian and licensed by it to the United States. The settlement will in no way affect the present status of these patents nor their present holders but will mean simply payments from the United States Treasury. This query of the arbiter is answered in the affirmative by Almuth C. Vandiver, of New York, attorney for the German chemical firm of I. G. Farbenindustrie, and in the negative by Herman J. Galloway, assistant attorney general, who appears for the government.

Mr. Vandiver contended during the preliminary argument that the Alien Property Custodian was an arm of the President for carrying out the policy of Congress in "Americanizing enemy property." In order to make effective the seizures of the German-owned stock of corporations in this country it was necessary to seize the patents on which many of these corporations depended, and this action was also desired to assist the development of the American Chemical industry and to protect such development from patent infringement suits after the war. In order to best "Americanize" the patents seized from Germans, Mr. Vandiver contended, the Chemical Foundation was incorporated as another agency of the President, and although it was owned by the chemical industry of the country its policies were directed by officials of the United States government. The Alien Property Custodian sold the Chemical Foundation a large block of chemical and other patents for $250,000, the Foundation receiving absolute right and title to the patents and pending applications for patents. Some two years later the Foundation executed with the Secretary of the Navy a license giving the United States the right to use all of these patents, the Foundation receiving $100,000 for this license.

It is the contention of Mr. Vandiver that, regardless of the lapse of two years, this license to the government was a part of the original agreement under which the Alien Property Custodian sold the patents to the Chemical Foundation, and that therefore the transaction was equivalent to a direct license by the custodian to the government, and hence is included in the class of patents which Congress directed should be paid for. Mr. Galloway for the government contends that this agreement to license was not part of the terms of sale, but that even if it were it would not bring these patents sold to the Chemical Foundation under this provision of the act of 1928.

Had Congress intended the act to be construed in accordance with the views of the attorney general, said Mr. Vandiver, it would be a discrimination against those former patentees whose patents were sold to the Chemical Foundation and in favor of those whose patents were otherwise disposed of. The fact that the Chemical Foundation grants licenses of the patents it holds to any American citizen or corporation he cited as proof that these patents are held for the benefit of the American people, and that this is a benefit for which Congress directed the former owners should be compensated. The written license granted the Navy to use these patents, Mr. Vandiver said, was mere form to give evidence of an agreement understood by both parties at the time the Chemical Foundation was incorporated and the patents conveyed to it.

St. Louis Paint Club Has Barbecue Meet at Fenton

Seventy-nine members and guests attended the Barbecue Meeting of the St. Louis Paint, Oil and Varnish Club held at Fenton, Mo., September 11.

During the afternoon a ball game was played between Cass DeLore's Dirty Dogs and Joe Eberhart's Rough Necks. The Dirty Dogs defeated the Rough Necks by a score of 8 to 6. The outstanding stars of the game were Dick Moore, of the Benj. Moore Company, St. Louis, and Bill Sime of the U. S. Color Card Company, Chicago. Mr. Moore was umpire and Bill Sime was scorekeeper. Shortstop Charlie Niemeyer of the Rough Necks sprained his leg sliding to second and wil be confined to his bed for several days. Joe Eberhart claims this is the reason for losing the game, as his outstanding star was unable to play.

At the business meeting the following delegates and alternates were appointed: —Delegates, Will Phelan, J. V. Reardon, H. C. Avis, C. P. DeLore, Fred Knoke, J. C. Henniges, Allen W. Clark, Dan Meehan; alternates, H. R. Henderson, Clarence Robbins, Max McClure, A. Niedt, H. D. Condie, Thompson Price, E. W. Weaver, Dr. John A. Schaeffer.

The "On to Detroit" Committee was also appointed and instructed to try to make up a special train. The committee is as follows:—Dan Meehan, chairman; Fred Knoke, vice-chairman; George Priest, Jr., J. C. Henniges.

A resolution condemning the practice of soliciting sustaining memberships and offering constructive suggestions was adopted and it will be presented to the national board of directors at their regular meeting.

Charles Shirley, who has just been retired from the National Lead Company after fifty years of service has been elected to honorary membership.

British Customs Rules Were Revised Sept. 1

The British Customs Department has issued new regulations governing the entry of goods liable to key industries duties. A complete change in the method of valuation has been made and the customs states that there is no obligation on its part to accept the invoiced price as the statutory value for the assessment of the duty and it also demands to inspect traders' accounts of sales in the United Kingdom.

A leaflet issued by the bureau in reference to the regulations follows:—

Evidence of Value

In view of difficulties that have arisen in connection with the declarations of value on Customs entries for goods liable to ad valorem duties the following statement is issued for the guidance of importers or agents concerned in the passing of import entries at this port. Special attention is directed to the procedure outlined at paragraphs 2 and 3, which will be put into operation September 1, 1928.

Acceptability of Invoice Price

There is no obligation on the Customs to accept the invoice price as the statutory value for assessment of duty, but where there is a genuine sale of goods outright in the open market in the ordinary course of trade, the importer may declare the value on the basis of the price shown on the invoice on which full and final settlement will be made, plus freight, insurance and other charges, and the value so declared will normally be accepted as the basis for assessment of duty. Where, however, the invoice does not represent a sale of goods in the circumstances referred to above, the invoice price can be accepted as a basis of valuation only if the commissioners are satisfied that it represents the price which would be paid on a purchase of the goods outright by an independent firm.

Certification of Invoices

In order to establish the acceptability of invoices as a basis for assessment of duty and to obviate any necessity for the detention of goods pending inquiries on this point, the commissioners invite importers to give one of the certificates provided in form C. 105.

(i) Certificate A in cases where the importer is an independent purchaser.

(ii) Certificate B where the importer is an agent of, or associated with, the consignor.

(iii) Certificate C where the invoices are on a basis agreed with the commissioners.

Express Traffic

In the case of importations by express services the commissioners recognize that it may not always be practicable to produce the certificate at the time the entry for the goods is made. In such cases, therefore, invoices unaccompanied by the certificate will usually be accepted subject to the agent who presents the entry giving an undertaking to produce a certified invoice within fourteen days from the date of the entry. General undertakings to this effect may be given by agents.

Where this procedure is followed, an extra copy of the invoice must be produced with the entry. This invoice will be stamped by the officer accepting the entry and returned to the agent for the purpose of obtaining the importer's certificate. When received, the certificate accompanied by the invoice should be lodged with the officers at the port at which the entry was accepted.

N. A. R. D. Convention Elects Denny Brann

SAN FRANCISCO, Sept. 15, 1928.

The convention of the National Association of Retail Druggists was adjourned today after five days' deliberation. The sessions opened Monday evening at the Hotel Whitcomb with business sessions in the Civic Auditorium Tuesday morning and afternoon, Wednesday morning and afternoon, Thursday morning and afternoon and Friday morning. The principal address was delivered by Representative Clyde Kelly of Pennsylvania, coauthor of the Capper-Kelly Fair Trade Bill. He promised renewed effort at the next session of Congress toward passage of the measure and predicted eventual success if trade co-operation is sufficient. Dr. J. H. Beal, Cocoa, Fla., spoke on the pharmacist as a citizen and gave a masterly analysis of governmental problems and civic duties. Clyde Eddy spoke on chain store development, analyzing the growth and methods of drug chains. E. R. Dunning spoke on advertising problems. E. C. Brokmeyer, association attorney, reported on national legislation. The work of the Druggists' Research Bureau was discussed by George Prigmore, Portland. A study of window display practices in retail drug stores was given by R. B. Evans, Jr.

A well-arranged survey of advertising pointers for retailers, by J. S. Gould, contained many good points applicable to retail drug business.

The new officers elected follow:—President, Denny Brann, Des Moines; first vice-president, Thomas Roach, Oklahoma City; second vice-president, Thomas J. Lenehan, San Francisco, present president of the Retail Druggists' Association of San Francisco; third vice-president, C. T. Hull, New Haven; secretary, Samuel C. Henry, Chicago; treasurer, Charles Ehlers, Cincinnati; executive committee, for three-year terms, Julius H. Riemenschneider, Chicago; Ambrose Hunsberger, Philadelphia. The next meeting place will be selected at the fall meeting of the executive committee, with invitations from Minneapolis, Buffalo and San Antonio, with Boston a contender for 1930.

The women's organization of the N. A. R. D. is headed by Mrs. J. H. Webster, Detroit, president, and Mrs. Leslie O. Wallace, corresponding secretary. The exhibitors' association elected William Weiseman, Armand Company, president; Leith Temperton, Sharp & Dohme, secretary.

The entertainment program included a reception and dance Monday night at the Hotel Whitcomb, automobile rides, a theatre party, Chinatown tour, afternoon boat ride in San Francisco Bay, and a farewell dance and entertainment at the Palace Hotel. The total registration was 1,500.

Mexican Drug Regulations Became Effective Sept. 16

Regulations governing the registration and certification of proprietary medicines, toilet, sanitary, and beauty preparations under the sanitary code of Mexico, promulgated June 8, 1926, have just been issued to become effective September 16, 1928, with sixty days additional grace for the fulfillment of the requirements, according to the United States Department of Commerce.

Products of this kind that are not presented for registration within the prescribed period will be rejected by the sanitary authorities and their importation, advertisement, and sale will be suspended.

Keister's Health Improves

James B. Keister, president of the National Paint, Oil and Varnish Association, and Mrs. Keister, have returned to San Francisco from a month's automobile tour of Oregon, Washington and British Columbia. Mr. Keister states that the trip has improved his health and expresses confidence that he will be able to attend the paint conventions in Detroit next month.

Narcotics Quotas Fixed

WASHINGTON, Sept. 13, 1928.

The Federal Narcotics Control Board today notified licensed importers of narcotics of their import quotas for the 1928-29 fiscal year. The quotas were not made public but it is understood that no import permits were given to firms who have not held licenses heretofore but who wished to enter the import field. Since the beginning of the fiscal year, July 1, importers have been doing business under temporary authority to import one-half of their quotas for last year during the period that the board has had under consideration the applications for imports this year.

Obituaries

Fred H. Hillman

Fred Henry Hillman, vice-president of the Standard Oil Company of California, died September 10 in San Francisco. He was sixty-six years old and had been engaged in the oil business forty-nine years.

Mr. Hillman entered the employ of the United Pipe Lines at Bradford, Pa., in 1879, as a messenger boy. He soon took part in pipe-line and production work, and on the formation of the Ohio Oil Company, became a part of the organization. Thereafter he was actively engaged in producing oil in Ohio, Illinois and Indiana, eventually becoming a director in the Ohio Oil Company.

In 1911 Mr. Hillman became a director of the Standard Oil Company of California, and was placed in charge of the company's crude oil production. June 2, 1914, he was elected a vice-president. He was also a director of the American Petroleum Institute.

Clayton F. Shoemaker

Clayton F. Shoemaker, one of the founders of the firm of Shoemaker & Busch, Inc., wholesale druggist, Philadelphia, and a former president of the National Wholesale Druggists' Associa-

Clayton F. Shoemaker

tion, died September 12. He had been an invalid since 1922, when his health forced his retirement from the company.

Mr. Shoemaker was born on a farm near Swedesboro, Gloucester county, N. J. At the age of sixteen years he entered the employ of the firm of French, Richards & Co., wholesale druggist, Philadelphia, Clayton French of that firm being his uncle. Mr. Shoemaker was determined to achieve success in the business world, and he made it his business rule to study the details, knowing that after he had mastered them he would be better fitted for directing others. On New Year's day, 1885, Mr. Shoemaker, with the late James C. Roller, began business under the firm name of Roller & Shoemaker, and shortly after Miers Busch became a member of the firm. On April 13, 1892, Mr. Roller withdrew, and the firm name was changed to Shoemaker & Busch. In 1922 Mr. Shoemaker sold his interest to Busch.

After serving several years on important committees, Mr. Shoemaker was elected president of the National Wholesale Druggists' Association in 1903.

A son, Clayton F. Shoemaker, jr., survives. The funeral was held September 15 at Philadelphia.

Obituary Notes

J. Harvey Scofield, secretary and manager of the Stamford Manufacturing Company, dyewood extracts, Stamford, Conn., before the company suspended operations several years ago, died September 9 at his home in Stamford. He had been with the firm forty years. A widow and two daughters survive.

R. L. Caruthers, for forty-five years an employee of the Spurlock-Neal Company, wholesale druggist, Nashville, Tenn., and recently manager of the sundries department, died September 7 at his home in Nashville. He was sixty-five years old. A widow, three daughters, and two sons survive.

N. Y. Paint Club Plans for Convention

First Gathering of the Season Hears Routine Reports and Discusses Problems

Plans for 100 percent co-operation in the business activities of the National Paint, Oil and Varnish Association in Detroit next month, consideration of the activities of the Save the Surface and Clean-up and Paint-up Campaigns, and establishment of nine scholarships in paint and varnish chemistry at Pratt Institute formed the outstanding features of the regular fall meeting of the Paint, Oil and Varnish Club of New York at the Hotel Biltmore on the evening of September 13. Reports of the various committee chairmen indicated that the affairs of the club are progressing in an orderly way, and the treasurer's report showed the organization in flourishing financial position.

There were about 175 members and guests present when W. R. Morpeth, president, called the gathering to order shortly before 7 p. m. The program for the evening had been outlined in the form of a docket, with everything on a time schedule. The time table, however, became sadly disarranged at times, although the general idea, that of limiting talkers to stated short periods, worked out satisfactorily. The entertainment committee had outdone itself in the preparation of the menu for the evening, the dinner generally being voted one of the best in recent years. Harold Rowe, on behalf of J. A. McNulty, presented the club with the original gavel given to the organization by its first president, Gen. E. L. Molineux, in 1887. The gavel had been in the possession of Mr. McNulty since the death of a former business associate, W. B. Templeton, who served as secretary of the club from the time of its organization in 1887 to 1914. Accepting the gavel, Mr. Morpeth remarked that it served to link the club with the past and would remind the present members of those who have gone before.

The next order of business was the reading of the minutes of the previous meeting by Dr. H. Litter, secretary. The report was approved by unanimous vote.

H. E. Hendrickson, treasurer, presented his report, showing that as of September 13 the club resources totaled $17,732.45, made up of bonds carried at par, $6,000, and cash in bank of $11,732.45. The report was approved.

(Continued on page 30)

German Nitrogen Use Decreased in Past Year

Nitrogen consumption has decreased in Germany somewhat during the past fertilizer year, although the consumption of German nitrogen showed a larger decrease than the total consumption, as a considerable amount of Chilean nitrate was imported, according to the United States Department of Commerce.

During the first six months of 1928 the German importation of nitrate of soda amounted to 81,080 metric tons, of which 78,433 tons came from Chile. The corresponding importation in 1927 was 15,733 tons, and the exportation of nitrate of soda during the first six months of 1928 was 19,385 tons, and 31,939 tons in 1927.

While last year showed a considerable export excess, this year has, up to the present, an import excess.

Sulphate of Ammonia

These facts do not indicate, as may be thought, that the German products are losing their markets because, on the other hand, sulphate of ammonia, the most important of all nitrogen fertilizers, has shown an export increase from 195,752 tons in the first six months of 1927 to 302,083 tons in 1928. Furthermore, the exportation of calcium nitrate, urea, and certain other chemical fertilizers has increased from 122,762 tons to 158,988 tons in the current year.

Thus it can be seen that the decrease in the domestic use of nitrogen fertilizer and the increased importation of Chilean saltpeter are compensated by the larger exportation of nitrogen fertilizer. It must be considered, of course, that the foreign trade figures mentioned are for six months only.

Phosphoric Acid Use Gains

The consumption of phosphoric acid has shown the greatest increase, probably because farmers are beginning to believe the reports from German scientists that the German soils need phosphoric acid. The present consumption of phosphoric acid, however, can not compare with the consumption in prewar times.

Although the German industry, including the I. G.'s plants, is able to supply the entire German market with phosphoric acid, basic phopsphate slag as well as superphosphate are imported on a large scale.

Potash sales have shown a steady increase since 1924-25. The exportation has been larger this year than last year and the figures concerning lime consumption show that agriculture is beginning to use lime on a larger scale.

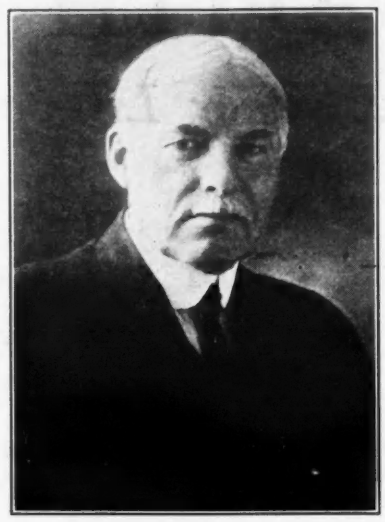
American Chemical Society Takes Step Forward in Industrial Relations

Review of Economic Phases of Nitrogen Supply Helps Mutual Understanding—Meeting At Swampscott Well Attended

SWAMPSCOTT, Mass., Sept. 14, 1928.

A first step, apparently a long one, toward better mutual understanding between the science of chemistry and the industries which it serves was taken at the seventy-fifth meeting of the American Chemical Society, here this week. This advance was made in a symposium on the economic status of nitrogen, at which leaders in the production of this substance synthetically and representatives of the large consuming industries told the chemists of many factors which point to an excess production of nitrogen by next year. Chemistry and the chemical industry had been roused to intensive study and application by reports a few years back that a scarcity of nitrogen, essential to the production of food crops, threatened the world.

In furtherance of the purpose to give chemists a better view of the needs of industry and the public, and the possibilities and limitations of the application of chemistry to such needs, a committee was appointed by the division of industrial and engineering chemistry to arrange for discussions of the economic side of applied chemistry at future meetings of the society.



Samuel W. Parr
President of the A. C. S.

The meeting, which opened Monday, comprised concurrent sessions of the various divisions of the society. It has been universally characterized as a successful as well as a pleasant meeting. The attendance exceeded all expectations, 1,870 persons being registered and many others being here for some of the sessions.

Headquarters for the meeting were at the new Ocean House. But, because of the large attendance, it was necessary to hold the sessions of some of the divisions, and to accommodate many of the visitors, in other hotels, sometimes more than a mile away. In spite of this and of the fact that the number of visitors was so large as to overdraw the supply of badges and identification tickets, the local committee, representing the Northeastern section of the American Chemical Society, handled the business and entertainment programs well.

General Meetings

Two general meetings of the society were held, one of them in two parts. The latter meeting was held Tuesday forenoon, Group A meeting under the auspices of the division of industrial and engineering chemistry and the division of organic chemistry. W. L. Evans, chairman of the latter division, presided. The Group B meeting was under the auspices of the division of physical and inorganic chemistry, its chairman, G. L. Clark, presiding.

W. H. Warren, speaking at the Group A meeting, gave a comprehensive review of the acceptance by chemists of a century ago of the synthesis of urea by Woehler. He told of other experiments which had verged on this achievement and compared the process employed by Woehler with those by which a little later others produced urea synthetically. Correspondence of leaders in chemistry in Great Britain and Continental Europe was quoted by the speaker to show that the discovery was quite generally attributed to Woehler, but the question of whether the synthesis was accomplished in 1824 or 1828 was somewhat in doubt. Dr. Warren was inclined to place it at the earlier date. His address in part dealt with the trend toward the study of synthesis which followed Woehler's discovery; although definite results were not attained until many years later.

Developments of Industrial Significance

A. D. Little also addressed the group A meeting, telling of the industrial significance of many recent developments in organic chemistry. The possibilities offered by petroleum as a chemical raw material were presented by the speaker in reporting some results of experiments in the experimental cracking plant at the laboratories of A. D. Little, Inc. The process employed in this work, he said, gave a yield of 46 percent of motor fuel from gas oil and produced also, from a barrel of oil, 0.85 gallon of tertiary butyl alcohol, 1.65 gallons of a mixture of secondary higher alcohols, 2½ gallons of isopropyl alcohol, and 800 cubic feet of a gas which contains 200 cubic feet of ethylene. The promises of an aliphatic era seemed to him great.

Dr. Little told of the use of ethylene in the ripening of picked fruit, declaring that lemons, treated with this gas, were of better appearance and taste than those ripened in the much longer way hitherto used. He also commented on the significance of the work reported by F. E. Denny at the recent meeting of the Society of Chemical Industry (see this paper for September 10, page 73) on the application of chemical treatment to the shortening of the rest period of growing plants, thus hastening their flowering and fruiting and extending the seasons for the production of vegetable foodstuffs.

The development of the processes for the production of amyl alcohol from pentane and the expectations logically to be based on the expansion of the low-temperature carbonization of coal were cited as other instances of significant chemical service to industry. Dr. Little pointed out the influence of the introduction of pyroxylin lacquers on the paint and varnish industry and the newer trends in the rubber industry, which have followed the adoption of rubber latex as the raw material of the manufacturer of rubber goods.

Dr. Little's address concluded with a review of work already done and a forecast of work that will be done in the industrial utilization of agricultural wastes. He predicted a new era in agriculture with the extension of the application of chemistry to the production of cellulose and solvents and special carbons from straw and similar substances.

Prof. Jocelyn F. Thorpe, of the Imperial College of Science, London, also addressed the group A meeting, his subject being "One Hundred Years of Organic Synthesis." He traced the development of organic chemistry from Woehler and Liebig and their contemporaries of the early part of the nineteenth century, through the vitalistic and structural conceptions down to the ring theory of Perkins. Developing broadly, with the assistence of charts, the ring theory, Prof. Thorpe declared that organic structure is now well understood, but that the mechanism of organic compounds remains to be studied. The simplicity of the production processes of nature has not been approached, he said, although the synthetic products often are purer than the natural.

An able address on "The Control of Reactions in Organic Synthesis" was given at the same meeting by Francis H. Carr, director of research for the association of British manufacturers of pharmaceuticals and other fine chemicals.

For the most part, the group B meeting was devoted to memorial addresses on Theodore William Richards (by G. P. Baxter) and Edgar Fahs Smith (by J. H. Hildebrand). Ernest H. Hansen, one of a number of visiting chemists from other countries, gave an address on "The Importance and Influence of Colloid-Chemical and Colloid-Physical Research Upon the Future Problems of Science and Industry."

Address of the President

The second general meeting, Wednesday evening, was devoted wholly to the address of the president of the American Chemical Society, Samuel W. Parr. Dr. Parr chose as his subject "Chemistry and the American Chemical Society." He took as his measure of the development of chemistry in this country the growth of publications devoted to the science in particular and to science in general, holding that the best evidence of development is the demand for an outlet for reports thereof.

Scientific publications were scarce in the United States even fifty years ago, Dr. Parr said. From that time, when he began the study of chemistry, their growth has been remarkable, a clear indication of the growth of science. Several important steps toward this, the chemical, age were pointed out by the speaker, none seeming to him of greater significance than the growth of the American Chemical Society from its small beginnings of about half a century ago. Today the chemist is universally of assistance, even in the everyday life of the people. Chemical industry has reached an annual production of upward of $2,000,000,000. Life has been bettered by the chemist, ar.* the future holds still more of benefit in store.

Industries Finance Abstracts

At the meeting of the A. C. S. Council, Monday, it was reported that almost 200 industrial concerns had subscribed as contributors to the financing of the society's plan to expand its service in the publication of abstracts of current chemical literature. The total subscribed was reported to be more than $50,000 a year for five-year periods. This is in addition to the contribution of $250,000 made by the Chemical Foundation for the same purpose.

Plans for the expansion of the abstract service were discussed at a luncheon meeting of the editors, and it is expected that the work will shortly be of still greater value to the technical, patent, and other staffs of American industries. The council re-elected the several editors of the abstract service.

Charles L. Parsons, secretary of the society, reported to the council that 1,000

(Continued on page 30)

McKesson & Robbins Offers Preferred Stock to Public Through Banking Group

Details of Financing of Recent Wholesale Drug Merger Are Contained in Prospectus Listing Of Issue Planned

An offer at $51 a share and accrued dividend, of 193,907 shares of 7 percent cumulative preferred $50 par stock of McKesson & Robbins, Inc., recently organized to merge the old McKesson & Robbins business with fifteen of the larger wholesale drug houses of the country, was made September 12 by a banking group consisting of Goldman, Sachs & Co., and Bond & Goodwin, Inc., this city; Bridgeport Trust Company, Bridgeport, Conn.; and R. F. Griggs Company, Meriden, Conn. Application will be made to the New York Stock Exchange for listing of the 309,648 shares of $50 par preferred and 664,409 shares of no-par common, to be presently issued.

Bankers' Circular

A prospectus of the offer issued by the bankers sets forth the following information regarding the capital structure of the company and the stock:—

Preference stock series A (the stock of which 193,907 shares are offered) is convertible to and including redemption date into common stock, share for share. Redeemable in whole or in part at any time on thirty days' notice at $60 per share and accrued dividends.

Capitalization

	Shares—Authorized.	Shares—To be presently issued.
Preference stock, par value $50	500,000	.....
Series A 7% convertible (dividends payable quarterly, cumulative from September 15, 1928)	.....	‡309,648
Common stock, no par	*5,000,000	‡664,409

† 10,352 additional shares may be issued in connection with the acquisition of shares of preferred stocks of the proposed subsidiaries not now under agreements nor presently to be called for redemption.

* Of the authorized common stock, 309,648 shares are reserved for conversion of the above 309,648 shares of preference stock series A, and 100,000 shares are to be reserved against certain options.

‡ Based on the acquisition through exchange of all of the common stock of McKesson & Robbins, Incorporated, of Connecticut, to be presently outstanding, of which over 96.8 percent is committed for exchange.

An offer to holders of preferred stocks of certain of the company's proposed subsidiaries, not now committed under agreements or options, to exchange their shares for cash or preference stock series A is now in effect (against which a maximum of 26,113 shares of preference stock series A may be issued directly or for the cash required); to the extent that shares of such preferred stocks are not exchanged for cash or called for redemption, the number of shares of this issue available for sale will be reduced below 193,907.

This stock is offered subject to allotment or prior sale and in all respects when, as and if issued in form acceptable to us and subject to approval of Root, Clark, Buckner, Howland & Ballantine and of Sullivan & Cromwell. It is expected that delivery of temporary stock certificates or of ad interim receipts will be made on or about September 28, 1928, at the office of Goldman, Sachs & Co., 30 Pine street, New York, against payment therefor in New York funds.

Coster's Letter

Salient portions of a letter to the bankers contained in the prospectus from F. Donald Coster, president of both the old and new McKesson & Robbins companies and leading spirit of the merger, setting forth details not already covered in the Reporter's article on the merger in its issue of August 20, follow:—

The acquisition of the common stock of McKesson & Robbins, Inc., of Connecticut is being effected entirey through exchange for common stock of the new company in the ratio of one share of common stock of the Connecticut company for two shares of common stock of the new company. Over 96.8 percent of the 172,500 shares of common stock of the Connecticut company to be presently outstanding is committed to this exchange, which is still available to the balance.

Preference stock series A is convertible into common stock share for share. The proceeds of the sale of shares of preference stock series A 7 percent convertible are to be utilized in connection with the acquisition of the stocks of the several proposed subsidiaries. The remainder of the 309,648 shares of preference stock series A and substantially all of the above 664,409 shares of common stock will be issued to the former stockholders of the proposed subsidiaries in connection with the acquisition of their shares.

Sales and Profits

The combined net sales of the businesses to be acquired and the combined net profits applicable to the company, as certified by Price, Waterhouse & Co., as defined and after adjustments* incidental to such acquisitions as set forth in their certificate, were as follows:—

Year ended Dec. 31.	Net Sales.	Combined net profits applicable to the company as defined in the above mentioned certificate†
1925	$71,347,330	$2,669,122
1926	74,160,859	2,746,168
1927	74,950,250	2,770,036
Four months ended Apr. 30, 1928	25,950,073	1,136,453

* Adjustments averaged an addition to profits of $5,317 per year.

† In the event that the company does not acquire any of the shares of common stock of McKesson & Robbins, Inc., of Connecticut not now committed for exchange, the combined net profits applicable to the new company for the three years and four months would have been less by an average of $18,527 per annum.

Assets

The consolidated balance sheet of the company and its proposed subsidiaries as at April

(Continued on page 58)

New Jersey zinc New Jersey zinc New Jersey zinc New Jersey zinc New Jersey zinc

RED LABEL

a remarkably smooth, soft brand of

ALBALITH

The Super Lithopone

ALBALITH—RED LABEL is of such a fine particle size and is so easily dispersed that it is particularly suited to the manufacture of enamels, mill whites and lacquers, where exceptionally smooth products with good leveling properties and high lustre are desired.

Manufacturers also have found that their undercoaters and flat wall paints gain smoothness of finish through the use of ALBALITH—RED LABEL.

High hiding power, at good working body, is a characteristic of all paints made with ALBALITH—RED LABEL. And because it is so readily wet by paint vehicles and so easily mixed and ground, maximum speed in production is obtained. *May we send you a sample for your investigation?*

The New Jersey Zinc Company
Established 1848

Products Distributed by
The New Jersey Zinc Sales Company
160 FRONT STREET, NEW YORK

Marquette Bldg. CHICAGO *Oliver Bldg.* PITTSBURGH *Guardian Bldg.* CLEVELAND *Merchants Exchange Bldg.* SAN FRANCISCO

Warehouse Stocks Carried At All Principal Points

New Jersey zinc New Jersey zinc New Jersey zinc New Jersey zinc New Jersey zinc

Ester Gums Lower—Vermilion Red and Carmine Up—Mixed Paint Prices Cut—Building Record Still Ahead of 1927

Higher prices on vermilion red, carmine No. 40, and a number of driers developed last week, with ester gums and casein a little easier. In the lacquer materials division of the trade, butyl acetate was quoted lower. Trading had shown a little improvement.

A feature of the week was the reported action of several of the larger paint manufacturers in reducing their list prices on first quality house paints by 35 cents a gallon, with quotations on flats undergoing minor downward revisions. It was indicated that the reductions would probably become general.

Construction contracts to the amount of $516,970,200 were awarded last month in the 37 States east of the Rocky Mountains, according to the Dodge Corporation report. These states include about 91 percent of the total construction volume of the country. The decline from July of this year was about $66,000,000, or 11 percent. The decrease from August of last year was about $35,000,000, or 6 percent. The New England States and the Northwest were the only two districts showing increases over their July, 1928, records, and the Central West, Northwest and Southeastern States were the districts showing increases over their August, 1927, records.

Last month's record brought the amount of new building and engineering work started in these 37 States since the first of this year up to $4,545,270,100, as compared with $4,274,871,100 for the corresponding period of last year, the increase being 6 percent.

New work contemplated last month in the 37 Eastern States amounted to $612,340,100. There was a loss of 5 percent from the amount reported in the preceding month and there was a drop of 11 percent from the amount reported in August of last year.

Building and engineering contracts were awarded during August to the amount of $126,859,400 in New York State and Northern New Jersey. This figure showed a drop of 8 percent from the amount contracted for during the preceding month and there was a 10 percent decrease from the total for August of last year. The first eight months construction total for this district was $1,198,258,000, as compared with $1,152,410,600 for the corresponding period of last year, the increase being 4 percent.

The total volume of construction contracts let in the New England States in August amounted to $39,035,200. The above figure exceeded July, 1928, by 7 percent, but there was a loss of almost 3 percent from the total for August, 1927. New construction started in this district during the first eight months of this year has reached a total of $323,763,700, being an increase of 18 percent over the amount started during the first eight months of last year.

The Middle Atlantic States (Eastern Pennsylvainia, Southern New Jersey, Maryland, Delaware, District of Columbia and Virginia) had $51,066,700 in contracts for new building and engineering work during the past month. The above figure was 18 percent below the total for July of this year and there was a drop of 27 percent from the total for August of last year. During the past eight months there was $537,174,700 worth of new construction work contracted for in this district which was a 7 percent increase over the amount contracted for during the corresponding eight months of 1927.

During the past month there was $57,304,200 worth of new construction work started in the Pittsburgh District (Western Pennsylvania, West Virginia, Ohio and Kentucky). The above figure was 8 percent less than the July, 1928, total and was 20 percent below the total for August of last year. The August contract total brought the amount of new building and engineering work started in the Pittsburgh district since the first of this year up to $487,859,300, which was a drop of 11 percent from the amount started during the corresponding period of 1927.

Building and engineering contracts let last month in the Central West (Illinois, Indiana, Iowa, Wisconsin, Southern Michigan, Missouri, Kansas, Oklahoma and Nebraska) amounting to $166,291,900 was the second highest August contract total on record for this district. It was 8 percent ahead of the August, 1927, record, but there was a drop of 18 percent from the July, 1928, total. New construction started in the Central West during the past eight months has reached a total of $1,384,057,900, which was an increase of 18 percent over the amount started during the corresponding period of last year.

New building and engineering work started last month in the Northwest (Minnesota, the Dakotas and Northern Michigan) reached a total of $10,448,500. This figure was the highest August contract total ever recorded in this district. It was 21 percent ahead of the total for the preceding month, as well as 6 percent ahead of the total for August of last year. The first eight months' construction total for the Northwest was $54,231,500, being a decrease of 14 percent from the total for the first eight months of last year.

August construction contracts in the Southeastern States (the Carolinas, Georgia, Florida, Tennessee, Alabama, Mississippi, Arkansas and Louisiana) amounted to $48,753,900. Last month's record was 3 percent in excess of the total for August of last year, but there was a drop of 8 percent from the total for July of this year. Total building and engineering work started in this territory since the first of this year amounted to $394,379,600, which was a 3 percent decrease from the total for the corresponding period of last year.

Texas had $17,210,400 in contracts for new building and engineering work during the month of August. The above figure was 10 percent less than the total for the preceding month and there was a 4 percent decrease from the total for August of last year. During the past eight months there was $165,635,400 worth of contracts awarded on new construction work in Texas, which was an increase of 8 percent over the amount contracted for during the first eight months of 1927.

Current prices on paint and varnish materials, formerly printed on pages 3 and 4, are now printed at the end of this market report.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced
Aluminum stearate, precip., 1½c. per lb.	Butyl acetate, ihported, drums, 3c. per gal.
Calcium stearate, precip., 1½c. per lb.	Tanks, 3c. per gal.
Casein, domestic, 80-100 mesh, ¼c. per lb.	Casein, 20-30 mesh, ¼c. per lb.
Copper stearate, precip., 1½c. per lb.	Imported, fine ground, ¼c. per lb.
Carmine No. 40, 50c. per lb.	Ester gum, light, ½c. per lb.
Vermilion red, 10c. per lb.	Dark, ½c. per lb.
Zinc stearate, precip., 1½c. per lb.	

Comparative Values

Index numbers compiled from eleven typical paint and varnish materials on the basis of a normal of 100 for August 1, 1914, compared as follows:—

Last week.	Prev. week.	Last month.	Last year.
151.1	151.1	151.1	153.2

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Metallic Lead and Zinc

Inquiry for prompt and October lead continued fairly active throughout the week, and the market was in firm position. Spot lead was reported short in the British market, with a premium of five shillings over the future quotation.

The market for slab zinc was with-

Valuable information on Imports and Exports of Paint and Varnish Materials is given in port lists beginning on page 5.

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THE HIGHEST GRADE LITHOPONE
Excels in Uniform Dependable Working Qualities
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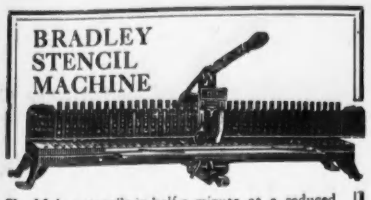

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Rouge Venetian Reds
French Yellow Ochres
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We furnish samples cheerfully
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FOR EVERY
REQUIREMENT
Manufactured by
The Standard Ultramarine
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Huntington, West Virginia

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out important change last week. Demand was fair. Stocks of slab zinc in the hands of American producers on September 1 were 44,416 short tons, compared with 42,210 tons on August 1, an increase of 2,206 tons, according to the American Zinc Institute. August production was 52,157 tons, and shipments 49,951 tons.

Lead Prices

Prevailing spot prices at New York, East St. Louis and London for the period from September 10 to September 14, inclusive, are detailed in the following table:—

	Pigs				
	Per pound		Spot London Per ton		
	New York.	E. St. Louis.	£	s.	d.
Monday	$0.0640	$0.0625	22	2	6
Tuesday	.0640	.0625	22	5	0
Wednesday	.0640	.0625	22	2	6
Thursday	.0640	.0625	22	2	6
Friday	.0640	.0625	22	1	3

Joplin Lead Shipments

Recent shipments of lead from Joplin have been as follows:—

	Short tons			
	Sept. 3-8.	Aug. 27-Sept. 1.	Total to date 1928.	1927.
Shipments	2,570	1,288	64,058	73,839

Zinc Prices

Prevailing spot prices at New York, East St. Louis and London for the period from September 10 to September 14, inclusive, are detailed in the following table:—

	Slabs				
	Per pound		Spot London Per ton		
	New York.	E. St. Louis.	£	s.	d.
Monday	$0.0660	$0.0625	24	14	9
Tuesday	.0660	.0625	24	15	0
Wednesday	.0660	.0625	24	13	9
Thursday	.0660	.0625	24	11	3
Friday	.0660	.0625	24	8	9

Joplin Zinc Shipments

Recent shipments of zinc from Joplin have been as follows:—

	Short tons			
	Sept. 3-9.	Aug. 27-Sept. 1.	Total to date 1928.	1927.
Shipments	8,858	10,584	404,634	460,643

Pigments

Conditions in the pigments group underwent no radical revisions last week, although slight increases in sales totals were reported on some lines. Little new business developed on spot, however, most of the increases being in contract withdrawals of materials.

With the pig lead and slab zinc markets in steady position, the market undertone on the principal pigments had stiffened a little, with consuming manufacturers operating with more confidence.

The Navy Department was in the market during the week with an inquiry for 30,000 pounds of blanc fixe in oil. Bids for supplying this material will be opened at the Bureau of Supplies and Accounts, Washington, D. C., on September 25.

White Lead.—Spot inquiry for dry white lead was holding up well during the week, and the market was in steady position. With quotations on white lead in oil guaranteed against corroders' decline for the next two months, buyers were taking stocks in advance of later requirements in fair quantities.

Red Lead.—There was a good demand for dry red lead in casks last week and the market remained in steady position, corroders quoting 9¾c. per pound in casks. Red lead in oil met with a fair demand along routine lines, prices holding steady.

Orange Mineral.—Trading was moderately active on the domestic product, quotations holding steady. Imported was quiet and unchanged in price.

Litharge.—Corroders reported some improvement in the demand for litharge in kegs for prompt shipment. The commercial powdered product was moving out in good volume, and showed a strong undertone.

Lithopone. — Paint manufacturers were in the market for lithopone in better volume, and were drawing stocks against contracts in a large way. There was very little spot activity noted, however, consuming manufacturers in most instances being covered by contracts on their requirements for the remainder of 1928. Quotations were without change.

Zinc Oxide.—Steady undertones prevailed on both the leaded and lead-free grades. Sellers reporting a good movement against contract with the paint trade. Consuming manufacturers in the rubber industry were reported extending their operations somewhat. Quotations were well maintained on all grades.

Barytes.—The market was uneventful throughout the week. Buyers were in the market only for small lots on the spot position, but a little improvement in the contract movement was to be noted. Prices showed no changes.

Dry Colors

Advances on vermilion red and carmine No. 40 featured the dry colors market last week, the increases in both instances being attributable to higher production costs.

Tonnage figures of sellers were reported larger last week than was the case in the preceding week, and the outlook for fall sales was reported as quite bright on most lines.

Blacks.—While paint manufacturers were taking standard carbon black only in limited volume, there was a good demand from makers of printing inks, and rubber manufacturers were also in the market in a large way. Prices were strongly held, both on spot and at the works. Lampblack inquiry had shown a little improvement, and quotations were well held on all grades. Black oxide of iron was moving out in good volume at steady prices.

Blues.—Sellers continued to quote a range of 32c. to 35c. per pound for spot iron blues, but it was not a difficult task for buyers with any large requirements to cover to shade the inside price considerably when booking. Demand had picked up somewhat, however, and sellers were adhering to listed quotations on the ordinary run of business.

Browns.—There was a good movement of earth colors on contract during the past week's trading, and spot inquiry had also picked up somewhat. Consuming manufacturers in most instances are covered on their requirements for the balance of the year by contracts written some time ago, however, and spot business is necessarily limited to small lots. Prices were steady and unchanged on all grades.

Greens. — Notwithstanding reported price shading on iron blues and chrome yellows, sellers noted a steady market on chrome greens, and apparently were having little difficulty in maintaining their listed prices on this item. Demand was fair. Chrome green oxide continued to move in satisfactory volume, with a steady undertone ruling. Other greens were quiet and unchanged.

Reds.—With cochineal in continued strong position, and spot stocks reported light, makers of carmine No. 40 again advanced their quotations last week. The increase amounted to 50c. per pound in most instances, carrying the market to $6.50 per pound, although $7.00 was quoted in some instances. Following another increase in the quicksilver market, vermilion red was again higher, being advanced 10c. per pound to a range of $1.95 to $2.00 a pound, as to seller. Other reds remained in steady position during the week, no price changes developing.

Yellows.—Interest continued to center in chrome yellow, and the market was reported still susceptible to price shading. Sellers were quoting 15½c. to 16¼c. per pound on spot, although the inside quotation was reported shaded by ¼c. per pound on large-lot business. Ochers were meeting with a routine demand, the market holding steady and unchanged on both domestic and imported grades.

Colors in Oil

With weather conditions over the eastern area having shown a change for the better, there was more inquiry for oil colors for prompt shipment reaching manufacturers last week, and the market took on considerable activity. The reduction in prices for mixed house paints and flats had not extended into the oil colors group.

Varnish Gums

Aside from a slight easing off in the position of ester gums, due both to stiffer competitive competition among makers and a reduction in raw material costs, the market for gums was in steady position in last week's trading. Demand from varnish manufacturers had shown some improvement.

Copals.—East Indian gums were not in heavy supply on spot during the week, and the market showed a strong tone. Holdings of pale bold, in particular, were reported light, with importers quoting a range of 18c. to 18½c. per pound. Manila grades were coming in for better inquiry, and the market was well maintained. Congo gums continued rather quiet. Sellers noted a better call for Pontianaks, prices of which held firm.

Dammars.—Singapore No. 3 was again in light supply on spot, and while goods could be had in a limited way at 12c. to 12½c. per pound for prompt shipment, as high as 14c. per pound was being quoted for later deliveries. Elemis were moving in slightly better quantities, at unchanged prices.

Kauris.—There was little change discernible in this division of the market. Demand continued confined within routine channels, importers reporting that there had been no developments of sufficient importance to further affect the price basis, one way or the other.

Esters.—Demand for ester gum had shown improvement, and with the advent of more inquiries, selling competition had sharpened. Although manufacturers earlier in the month had been talking an early advance, easing off in the position of water white rosin has changed the situation, and lower quotations were being made last week. Light gum was generally held at 8½c. to 9c. per pound, although sellers in

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at least one instance went under this figure. The dark gum was ½c. lower at 8c. to 8½c. per pound on spot.

Other Paint Materials

A good inquiry for the general line of other paint materials ruled during the past week's trading, with quotations well maintained on most items. Aside from a few fractional price revisions on casein, the market was without change.

Casein.—Domestic 20-30 was ¼c. lower at 16c. to 16¼c. per pound, with 80-100 mesh in shorter supply and quoted up ¼c. at 17c. to 17¼c. per pound. Imported fine-ground was ¼c. easier at 16½c. to 17c. per pound. June casein imports were 2,659,620 pounds, of which total 2,260,536 pounds came from the Argentine.

China Clay.—There was a well-maintained demand for shipments of China clay against contracts last week, and the market was in steady position on both the domestic and the imported qualities.

V. M. and P. Naphtha.—No change had developed in the price basis last week, but the market was not as firm as has been the case in recent weeks. Deodorized varnish makers' and painters' naphtha in barrels continued held at 20c. per gallon.

CHICAGO, Sept. 14.—The paint and varnish trade continues to take out good quantities of V.M.&P. naphtha, according to sources of supply on this material, and there is a good tone in the dealings for the product, with prices well maintained. While there is no actual scarcity, the supply is not overly large. Ruling prices were (per gallon):—Tankcar, 13.9c. (f.o.b. Whiting); tankwagon, 16.2c.

Whiting.—A moderate inquiry for domestic whiting was reported, the market holding at $1.00 per 100 pounds, with English cliffstone held at 50c. over this figure. Gilders' bolted was steady at $1.25 to $1.35 per 100 pounds, with extra bolted ranging $1.40 to $1.50.

Driers

There was a stronger market for stearates last week, makers increasing their quotations in line with the stronger position of stearic acid. Demand for the general line of driers had slowed down a little, insofar as new business was concerned, but there was a continued good movement on contract. Aluminum stearate, precipitated, was 1½c. per pound higher at 24c. to 24½c. per pound for the week, with calcium stearate showing a corresponding increase to the same level. Copper stearate, precipitated, advanced 1½c. to 30½c. to 31c. per pound. Zinc stearate, precipitated, registered a gain of 1½c. to 22½c. to 23c. per pound.

Metal Leaf

Sellers were looking for a brisker market over the fall months, with early buying of gold leaf for the holiday trade anticipated. There were no changes in quotations on gold leaf last week, a steady undertone featuring the market. Silver leaf inquiry had shown a little improvement, and the market was well maintained at $2.25 to $2.75 per package for the 3¾ square inch size.

Lacquer Materials

With the exception that foreign butyl acetate was being offered down to a basis of $1.33 per gallon in tanks, and $1.35 in drums, which was a 3c. concession over previous prices and about 7c. per gallon below the quotations named by domestic producers, there was no important alteration in any product in the lacquer materials division last week. A continued heavy contract movement has been in progress in ethyl acetate at the going quotations. Buying for the account of the artificial leather industry has been one of the mainstays of the market, and this is expected will continue during the next few weeks. Strength in several raw material products, including denatured and methyl alcohol as well as acetic acid, has prompted similar strong conditions in some of the lacquer materials. Last week some of the domestic producers were reported to be taking on increasing quantities of toluene and xylene, although the former was in decidedly limited supply. The producers of butyl alcohol maintained their quotations and said they were in receipt of a general satisfactory volume of orders. Plasticizers and softeners were held at previous prices. A good demand was remarked for triphenyl phosphate. No small part of the buying which was being done in lacquer materials continued for the account of the automotive industry. Latest estimates were that automobile production for 1928 would establish a new high record, breaking through the previous high of 1926 when 4,503,529 motor vehicles were manufactured in this country.

Glues

An improved inquiry for bone glue was reported last week, the market holding steady at 17c. to 18c. per pound on the spot position. Hide cabinet glue prices were steady at 24c. to 28c. per pound for the high grade product, and 21c. to 25c. per pound for the low grade. Fish liquid glue continued held at $1.90 to $2.35 per gallon, with sellers noting a fair inquiry.

Window Glass

There was a steady market for window glass reported during the past week's trading. Manufacturers were kept busy in getting out shipments against old contracts, and there was a good volume of new business reported reaching sellers. Stocks of the manufacturers have been materially reduced by the heavy buying movement over the summer season.

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"Once Ground"	80%—200 mesh	Apparent Density	.595 to .80
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In Rose, Cream or Light Cream		Special grades for special uses	

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With automobile production running close to record figures, and jobbers and mirror manufacturers also drawing stocks in a large way, the plate glass division of the market remained in steady position. Prices and discounts were without change during the week.

Current Prices

(For late price changes, see page 2)

Pigments

Antimony, white, barrels	lb.	.16½@	.17
Asbestine (see Talc, fibrous, in Other Paint Materials).			
Barytes, domestic, floated, car lots, barrels	ton.	30.50 @	—
less car lots, barrels	ton.	34.50	@35.00
f.o.b. St Louis, car lots, barrels	ton.	23.00 @	—
Southern, off color, works, bulk	ton.	12.00	@20.00
imported, barrels	ton.	27.00	@34.00
Blanc fixe, dry, car lots, works, barrels	lb.	.03½@	—
less car lots, works, barrels	lb.	.03¾@	—
pulp, works, bulk	ton.	42.50	@45.00
Flake, white, barrels	lb.	.12¼@	—
Litharge, assayers', casks	lb.	.08¾@	—
steel kegs	lb.	.13¼@	—
*commercial, powdered, casks. 100 lbs.		8.75 @	—
*steel kegs, less than 500 lbs.	lb.	.13¼@	—
500 to 2,000 lbs	lb.	.1192@	—
2,000 to 10,000 lbs	lb.	.1144@	—
10,000 to 30,000 lbs	lb.	.1103@	—
car lots, minimum 15 tons.	lb.	.1073@	—
Lithopone, domestic, car lots or more, bags	lb.	.05¼@	—
barrels	lb.	.05½@	—
less car lots, bags	lb.	.05½@	—
barrels	lb.	.05¾@	-
imported, ex-dock, barrels	lb.	.05¼@	.05½
ex-warehouse, barrels	lb.	.05¾@	.06
Metallic red or brown, Pennsylvania works, bags, barrels.	ton.	37.00	@45.00
Orange mineral, American, casks	lb.	.11¾@	.13
French, Tours, casks	lb.	.16½@	—
kegs	lb.	.17½@	—
*Red lead, dry, casks....100 lbs.		9.75 @	—
less than 500 lbs., 100-lb. kegs.	lb.	.13¼@	—
500 to 2,000 lbs., kegs	lb.	.1192@	—
2,000 to 10,000 lbs., kegs	lb.	.1144@	—
10,000 to 30,000 lbs., kegs	lb.	.1103@	—
car lots, min. 15 tons, kegs	lb.	.1073@	—
*Red lead in oil, less than 500 lbs., steel kegs	lb.	.14¾@	—
500 to 2,000 lbs., kegs	lb.	.1327@	—
2,000 to 10,000 lbs., kegs	lb.	.1274@	—
10,000 to 30,000 lbs., kegs	lb.	.1227@	—
car lots, min. 15 tons, kegs	lb.	.1194@	—
Titanium pigment, works, carlots, bags, barrels	lb.	.10 @	—
less car lots, barrels	lb.	.10½@	—
dioxide, barrels	lb.	.35 @	—
White lead, basic carbonate, American, dry, casks	lb.	.08½@	—
basic sulphate, casks	lb.	.07½@	—
*White lead in oil, less than 500 lbs., 100-lb. kegs	lb.	.13¼@	—
500 to 2,000 lbs., kegs	lb.	.1192@	—
2,000 to 10,000 lbs., kegs	lb.	.1144@	—
10,000 to 30,000 lbs., kegs	lb.	.1103@	—
car lots, minimum 15 tons, kegs	lb.	.1073@	—
Zinc oxide, American process, commercial, lead free, car lots, bags	lb.	.06½@	—
barrels	lb.	.06¾@	—
less car lots, barrels	lb.	.07 @	—
5 p.c., leaded grades, car lots, bags	lb.	.06¾@	—
barrels	lb.	.06¾@	—
less car lots, barrels	lb.	.07 @	—
bags	lb.	.06¾@	—
10, 20 or 35 p.c. leaded grades, car lots, bags	lb.	.06¾@	—
barrels	lb.	.06¾@	—
less car lots, bags	lb.	.06¾@	—
barrels	lb.	.07 @	—
Zinc oxide, French process, green seal, car lots, bags	lb.	.10¾@	—
barrels	lb.	.10¾@	—
less car lots, barrels	lb.	.10¾@	—
red seal, car lots, bags	lb.	.09¾@	—
barrels	lb.	.09¾@	—
less car lots, barrels	lb.	.09¾@	—
white seal, car lots, barrels,	lb.	.11¾@	—
less car lots, barrels	lb.	.11¾@	—
imported, green seal, ex dock, barrels	lb.	.10¾@	.12
ex warehouse, barrels	lb.	.10¾@	.12¼
Zinc oxide, imported, red seal, ex dock, barrels	lb.	.09¾@	—
ex warehouse, barrels	lb.	.09¾@	—
white seal, ex dock, barrels,	lb.	.12¼@	.13
ex warehouse, barrels	lb.	.12½@	.13¼

* All prices subject to cash discount of 2 percent and are single delivery.

Dry Colors

Blacks

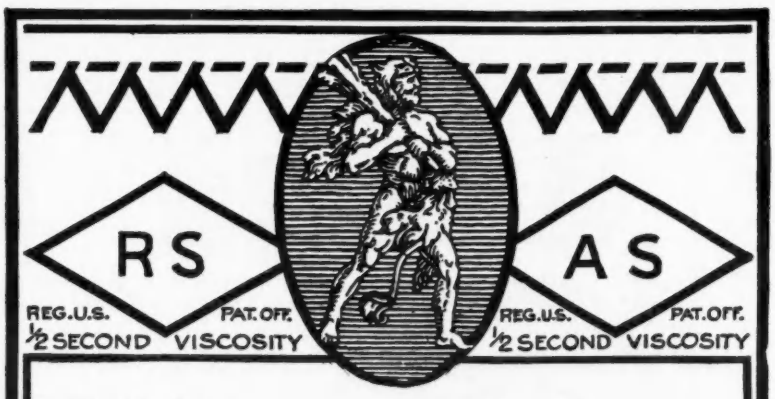
Bone, powdered, barrels	lb.	.05½@	.15
Carbon gas, litho ink qualities, bags	lb.	.22 @	.30
standard rubber, ink and paint qualities, bags, cases	lb.	.12½@	.13
works, bags	lb.	.07½@	—
varnish grade, highest, bags,	lb.	.35 @	.55
medium, bags	lb.	.16 @	.26
Charcoal, common, barrels	lb.	.05 @	—
willow, powdered, barrels	lb.	.06 @	.07
Drop, barrels	lb.	.03½@	.15
Iron oxide, commercial, barrels,	lb.	.04½@	.07
C.P., barrels	lb.	.10 @	.15
Ivory, genuine, barrels	lb.	.30 @	.35
Lampblack, commercial, barrels,	lb.	.09 @	—
grinders' blue-tone, barrels	lb.	.18 @	.20
litho, barrels	lb.	.25 @	—
special high-grade, barrels	lb.	.50 @	—
velvet, barrels	lb.	.12 @	—
Mineral blacks, works, bags	ton.	28.00	@32.00

Blues

Bronze, barrels	lb.	.32 @	.35
Celestial, barrels	lb.	10 @	15
Chinese, barrels	lb.	.32 @	.35
Milori, barrels	lb.	.32 @	.35
Prussian, barrels	lb.	.32 @	.35
Soluble, barrels	lb.	.32 @	.35
Ultramarine, barrels	lb.	.06 @	.30

Browns

Sienna, American, burnt, powdered, ton lots, barrels	lb.	.03 @	.04
raw, powdered, ton lots, barrels	lb.	.02¾@	.03½
Italian, burnt, powdered, ton lots, barrels	lb.	.05¼@	.12½
raw, powdered, ton lots, barrels	lb.	.05½@	.12½



Nitrocellulose

Clear Lacquers for Polished Surfaces

Lacquers for use on highly polished metal surfaces should be clear and practically water-white. Such lacquers can best be produced when the nitrocellulose is made from high-grade, well-bleached linters by a carefully controlled process.

The superiority of Hercules Silver Lacquer Nitrocellulose shows up very quickly in lacquers of this type.

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Why Butanol?

To the Manufacturer of Lacquer—Butanol guarantees*

No Formulating Difficulties

Butanol* is stable in the presence of all pigments and is readily compatible with gums, oils, and synthetic resins, thus permitting the use of a wide range of film-forming materials.

Simplicity of Manufacture

The extraordinary compatibility and adaptability of Butanol*—it satisfactorily serves many purposes—permit the reduction of the number of necessary lacquer ingredients to a minimum.

Lowest Production Cost

Directly and indirectly, Butanol* brings down raw material cost, together with labor and overhead charges, to the lowest point consistent with the production of a satisfactory lacquer.

Satisfied Customers

Butanol* in lacquer gives protection against blushing; assures smooth, completely united coats; reduces the time necessary for sanding and polishing; permits easy touching up wherever necessary and, because of its freedom from dangerous impurities, assures maximum life to the film.

Time-tested—its merit proven by successful lacquer manufacturers everywhere, Butanol is the standard of value by which other lacquer solvents must be judged.

*and its derivatives

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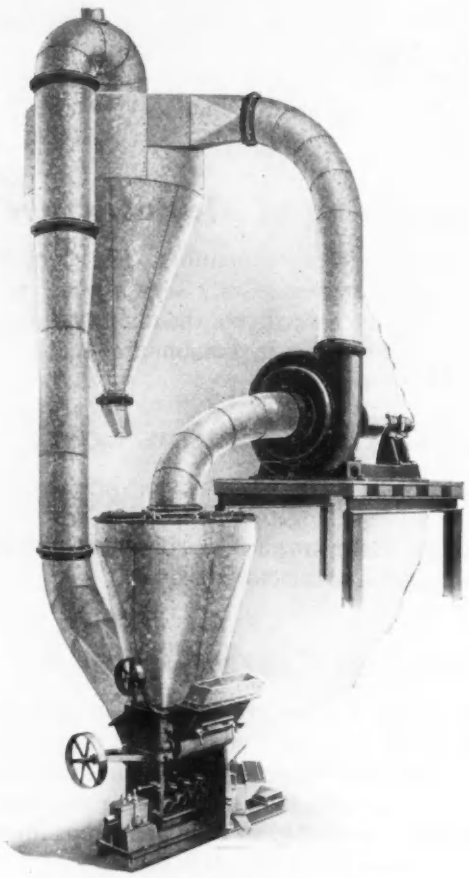

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(synthetic high boiling solvent)

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The Duplex Seal is the ideal seal for tin packages for these reasons:

1 Mechanical simplicity and scientific correctness—assuring an absolute and permanent air-tight seal.

2 Liners to meet chemical and physical requirements of the product.

3 Tamper-proof inner seal if desired.

4 Standard designs or special seals having trade-marks handsomely embossed or lithographed.

5 Quick application by means of hand closing tools or power closing machines, where volume is necessary.

6 It cannot "creep" or work loose in shipment regardless of rough handling or transportation conditions.

7 Opened by quarter turn of the wrist. Closed with the same easy motion—a *positive* resealing device.

7 Opened by the consumer with a quarter turn of the wrist and closed with the same easy motion—a *positive* resealing device.

The easiest seal to take off, the easiest seal to replace. No digging with a fork or prying with a knife.

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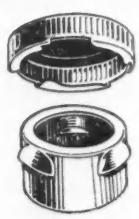
The Duplex Seal protects the products of hundreds of manufacturers of paints, oil and varnishes, and other tin-packed products. All can companies can supply cans provided with Duplex Nozzles.



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State of Kentucky Representatives:
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James Brokerage Co.
329 First National Bank Building
Houston, Texas

Spanish, high grades, bulk	lb.	.03 @	—
low grades, bulk	lb.	.02½@	—
Umber, American, burnt, powdered, car lots, barrels	lb.	.02¾@	.03¼
raw, powdered, car lots, barrels	lb.	.02¾@	.03¼
Turkey, burnt, powdered, ton lots, barrels	lb.	.04 @	.06
raw, powdered, ton lots, barrels	lb.	.04 @	.06
Vandyke, domestic, ton lots, barrels	lb.	.03 @	.03¼
imported, barrels	lb.	.04¼@	.05

Greens

Chrome, C.P., dark, barrels	lb.	.30 @	.33
light, barrels	lb.	.27 @	.31
medium, barrels	lb.	.28 @	.31
oxide, domestic, kegs	lb.	.30 @	.32
barrels	lb.	.27 @	.28½
imported, kegs	lb.	.34 @	.44
Commercial, barrels	lb.	.06¼@	.10
Grinders', barrels	lb.	.08 @	.19
Jobbers', barrels	lb.	.06¼@	.07
Limeproof, kegs	lb.	.09¼@	.15
Paris (see Industrial Chemicals).			
Verdigris, casks	lb.	.22 @	.23

Reds

Amaranth (maroon lakes), kegs	lb.	.50 @	1.50
Alizarin, lake, concentrated, kegs	lb.	1.50 @	2.10
Carmine, No. 40, 11-lb. tins	lb.	6.50 @	7.00
Crocus martis, purple oxide, barrels	lb.	.03 @	.05
Eosin, kegs	lb.	.65 @	.75
Indian, American, ordinary, barrels	lb.	.03 @	.08
pure, barrels	lb.	.10 @	.14
English, ordinary, barrels	lb.	.06 @	.09
pure, barrels	lb.	.11 @	.14
Lithol toner, kegs	lb.	.85 @	1.10
Mercury oxide, technical, imported, cases, barrels	lb.	2.00 @	2.05
domestic	lb.	2 11 @	—
Oxide, copperas, casks	lb.	.04 @	.14
earth, domestic, barrels	lb.	.02 @	.04½
Spanish, barrels	lb.	.03 @	.04½
Para toner, concentrated, 100-lb. lots, kegs	lb.	.69 @	.80
reduced, 10 percent, kegs	lb.	.10 @	.13
Purple lake, kegs	lb.	.60 @	2.00
Rose pink, barrels	lb.	.15 @	.25
lake, barrels	lb.	.20 @	.30
Scarlet lake, kegs	lb.	.35 @	.90
Toluidin toner, kegs	lb.	1.60 @	1.75
Tuscan, barrels	lb.	.15 @	.40
Venetian, barrels	lb.	.01½@	.05
Vermilion, American, barrels	lb.	.15 @	.25
English quicksilver, kegs or barrels	lb.	1.95 @	2.00

Yellows

Chrome, C.P., ton lots, light, medium, dark, barrels	lb.	.15½@	.16¼
Dutch pink, barrels	lb.	.08 @	.10
Iron oxide, natural, barrels	lb.	.04 @	.05
precipitated, barrels	lb.	.08 @	.12
Mercury oxide, technical, imported, cases, barrels	lb.	2.00 @	2.05
domestic	lb.	2.11 @	—
Ocher, domestic, golden, barrels	lb.	.06 @	.07½
yellow, barrels	lb.	.01¾@	.02¾
French, dark, casks	lb.	.02¾@	.02¾
dark, medium, casks	lb.	.03 @	.03¼
extra light, casks	lb.	.03½@	.03⅝
light, casks	lb.	.03⅛@	.03¼
light medium, casks	lb.	.03⅛@	.03¼
medium, casks	lb.	.03 @	.03¼
Zinc yellow, barrels	lb.	.23 @	.26

Colors in Oil

(In 1-lb. cans; ½c. per lb. less in 5-lb. cans. Basis 100-lb. cases)

Blacks

Coach	lb.	.32 @	.34
in japan	lb.	.48 @	.50
Drop	lb.	.32 @	.34
Lampblack	lb.	.44 @	.45

Blues

Chinese	lb.	.60 @	.65
Imitation cobalt	lb.	.52 @	.54
Prussian	lb.	.60 @	.65
Ultramarine	lb.	.46 @	.48

Browns

Sienna, Italian, best grades	lb.	.30 @	.32
Umber, Turkey, best grades	lb.	.25 @	.27
Vandyke, genuine	lb.	.27 @	.29

Greens

Chrome, C.P., in japan	lb.	.48 @	.50
commercial, 25 percent	lb.	.27 @	.29

Reds

Indian	lb.	.31 @	.32
Tuscan	lb.	.41 @	.43
Venetian	lb.	.17 @	.20

Yellows

Carome, C.P.	lb.	.40 @	.42
Ocher, French	lb.	.21 @	—

Lacquer Materials

Bases

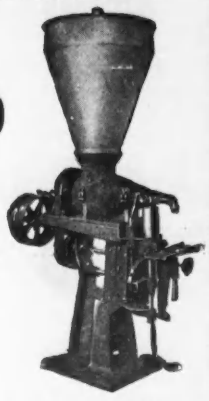
Cellulose acetate, bags	lb.	1.20 @	1.25
Nitrocellulose, ½ sec., dehydrated, works, barrels	lb.	.36 @	—
15-20 sec., dehydrated, works, barrels	lb.	.33 @	—
regular, works, drums	lb.	.40 @	—

Solvents and Diluents

Alcohol, C.D. 1, anhydrous, frt. alld. E. of Miss., car lots, drums	gal.	.68 @	—
less car lots, drums	gal.	.71 @	—
tanks	gal.	.66 @	—
Amyl alcohol, refined from fusel oil, drums	gal.	1.90 @	2.10
from pentane, small lots, works	gal.	2.25 @	—
car lots, works, drums	gal.	1.67 @	—
less car lots, drums	gal.	1.75 @	—
tanks, works	gal.	1.65 @	—
Butyl acetate, domestic, car lots, tanks	gal.	1.40 @	—
car lots, drums	gal.	1.42 @	—
less car lots, drums	gal.	1.45 @	—
imported, drums	gal.	1.35 @	—
tanks	gal.	1.33 @	—
alcohol, works, tanks	lb.	.1775@.1875	
car lots, drums	lb.	.1825@.1925	
less than car lots, drums,	lb.	.1875@.1975	
less than 100 gals., drums	lb.	.2075@.2125	
cans	lb.	.2225@	—
tate, tanks	lb.	.25 @	—
ms	lb.	.27 @	—
Diacetone alcohol, car lots, drums,	gal.	1.42 @	1.47
500 gallons or more	gal.	1.55 @	—
100 gallons or more	gal.	1.60 @	—
Diethyl carbonate, 90 p.c., drums,	gal.	1.85 @	1.90
Ethyl acetate (see Industrial Chemicals, page 8).			
anhydrous, car lots, drums,	gal.	1.09 @	1.14
less car lots, drums	gal.	1.12 @	1.17
tanks	gal.	1.07 @	1.12
lactate, drums	lb.	.30 @	.37
oxybutyrate, drums	lb.	.30 @	.35
Ethyleneglycol monobutyl ether, works	lb.	.26 @	.31
monoethyl ether, works, car lots, drums	lb.	.20 @	—
less car lots, drums	lb.	.21 @	.24
tanks	lb.	.19 @	—
monoethyl ether acetate, works, car lots, drums	lb.	.23 @	—
less car lots, drums	lb.	.23½@	.26
tanks	lb.	.22 @	—
Isoamyl alcohol (primary), works, drums	gal.	3.50 @	—
works, cans	gal.	4.00 @	4.50
Methyl acetate, domestic, drums,	gal.	.85 @	.95
imported, drums	gal.	.85 @	.95

Plasticizers and Softeners

Acetanilide, 95 p.c., barrels	lb.	.21 @	—
Acetin, technical, drums	lb.	.32 @	.34
Butyl tartrate, drums	lb.	.55 @	.60
Camphor (see Gums and Waxes).			
Castor oil, blown, car lots, drums	lb.	.14½@	—
less car lots, drums	lb.	.14¾@	—
Diamyl phthalate, drums	lb.	.33 @	—
Dibutyl phthalate, drums	lb.	.27½@	.29
Diethyl phthalate, drums	lb.	.25 @	.29
Ethylmetatoluenesulphonamide, barrels	lb.	.65 @	—
Ethylparatoluenesulphonamide, barrels	lb.	.70 @	—
Paratoluenesulphonanilide, barrels	lb.	.55 @	—
Triacetin, drums	lb.	.37 @	.38
Tricresyl phosphate, drums	lb.	.35 @	.45
Triphenyl phosphate, drums	lb.	.60 @	.65



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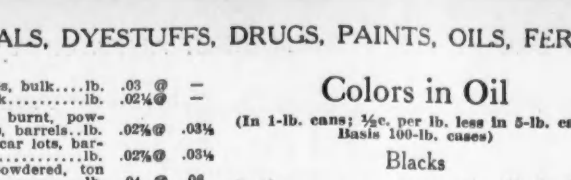

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Asphaltum, Barbados (Manjak), A, barrels	lb.	.06½@	.07
AA, barrels	lb.	.13⅜@	—
California, barrels	ton.	41.00	@49.00
Cuban, cases	ton.	60.00	@150.00
Egyptian, bags	lb.	.15 @	.16
Gilsonite, select, bags, car lots, works	ton.	33.00 @	—
ex warehouse, bags	ton.	35.00	@60.00
Maltha, barrels	ton.	53.00	@67.50
Mexican, barrels or drums	ton.	21.00	@23.00
Texas, barrels or drums	ton.	15.00	@25.00
Trinidad, com'l., barrels	ton.	23.00	@35.00
varnish grade, barrels	ton.	115.00	@120.00
Copal, Congo, dark amber, bags,	lb.	.07½@	.07¾
sorts, bags	lb.	.04¾@	.05¼
water white, bags	lb.	.37 @	.45
E. Indian, pale bold, cases	lb.	.18 @	.18½
nubs, bags	lb.	.14 @	.14¼
chips, bags	lb.	.06 @	.06½
black, bold, scraped, bags	lb.	.07 @	.07½
unscraped, bags	lb.	.05¼@	.06
nubs and chips, bags	lb.	.05¼@	.05½
Manila, bright amber, cases,	lb.	.15 @	.15¼
dark, hard, cases	lb.	.16 @	.17
pale, chips, bags	lb.	.10½@	.10¾
nubs, bags	lb.	.14½@	.15
standard, sorts, bags	lb.	.09½@	.10
Pontianak, genuine, selected bold, bags	lb.	.17 @	.17¼
chips, small, bags	lb.	.13 @	.13¼
split, bags	lb.	.16 @	.16½
nubs, No. 1, bags	lb.	.14 @	.14¼
mixed, cases	lb.	.12½@	.13
Dammar, Batavia, cases	lb.	.22¼@	.22¾
seeds, cases	lb.	.16 @	.16½
Singapore, No. 1, cases	lb.	.29½@	.30
No. 2, cases	lb.	.23 @	.23½
No. 3, bags	lb.	.12 @	.12½
Elemi, No. 1, cans	lb.	.12½@	.13
No. 2, cans	lb.	.11½@	.12
No. 3, cans	lb.	.10½@	.11
Kauri, bright, dust, cases	lb.	.16 @	.17
brown, BX, cases	lb.	.48 @	.50
B 1, cases	lb.	.32 @	.35
B 2, cases	lb.	.21 @	.24
B 3, cases	lb.	.15½@	.17
chips, extra, cases	lb.	.22 @	.24
ordinary, cases	lb.	.10½@	.12
dust, cases	lb.	.06 @	.10
pale, fine, cases	lb.	.75 @	1.50
No. 1, cases	lb.	.48 @	.55
No. 2, cases	lb.	.30 @	.35
No. 3, cases	lb.	.14 @	.17
dust, cases	lb.	.07 @	.08
white, chips, ord., cases	lb.	.19 @	.23
dust, ordinary, cases	lb.	.11½@	.14

Artificial Resins

Paracoumarone resin, car lots, drums	lb.	.07 @	.12
Ester gum, dark, barrels	lb.	.08 @	.08½
light, barrels	lb.	.08½@	.09

Other Paint Materials

Bauxite, mines, bulk	ton.	5.00 @	8.00
Bronze powder, aluminum, bulk,	lb.	.60 @	1.20
gold, bulk	lb.	.55 @	1.25
Casein, domestic, 20-30 mesh, car lots, bags	lb.	.16 @	.16¼
80-100 mesh, car lots, bags	lb.	.17 @	.17¼
imported, fine ground, car lots, bags	lb.	.16½@	.17
Chalk, grinders', powdered, barrels	ton.	12.00 @	—
China clay, domestic, lump, mines, bulk	ton.	8.00 @	9.00
powdered, bags	ton.	10.00	@15.00
imported, lump, bulk	ton.	15.00	@25.00
powdered, barrels	lb.	.03 @	.03½
Cobalt oxide, black, kegs	lb.	2.10 @	2.20
Copper oxide (see Industrial Chemicals).			
Feldspar, powdered, works, bulk,	ton.	15.00	@21.00
Fuller's earth, domestic, mines, bulk	ton.	15.00	@20.00
imported, powdered, car lots, bags	ton.	25.00	@30.00
Graphite, flake, barrels	lb.	.06 @	.09
ground, barrels	lb.	.04 @	.07
Infusorial earth, white, bags	ton.	25.00 @	—
Lime sulphide, luminous, tins	lb.	1.00 @	1.25
Magnesia silicate (see talc).			
Manganese ore, powd. or gran., 75@80 p. c., barrels	lb.	.03 @	.03½
80@85 p.c., barrels	lb.	.04 @	.04½
85@88 p.c., barrels	lb.	.05 @	.05½
Marble flour, bags	ton.	14.00	@15.00
Mica, dry ground, works, bags,	ton.	65.00	@80.00
wet ground, works, bags	ton.	110.00	@115.00
Naphtha, v.m.&p., deodorized, barrels	gal.	.20 @	—
Pitch, hardwood, works, one-time container	ton.	40.00	@45.00
Plaster of paris, bags	ton.	23.00	@29.00
barrels	100 lbs.	3.40	@ 3.50
dentists', barrels	100 lbs.	3.75 @	—
Pumice stone, lump, casks	lb.	.05 @	.07
powdered, pure, barrels	lb.	.02½@	.04
Putty, commercial, tube	lb.	.03¼@	—
linseed oil, kegs	lb.	.05½@	—
Rottenstone, domestic, mines, bulk	ton.	23.50	@28.00
imported, barrels	lb.	.05 @	.07
powdered, barrels	lb.	.02½@	.04½
selected, lump, barrels	lb.	.10 @	.12
Silica, fine ground, works, bulk, water floated, works, bulk	ton.	22.00	@30.00
extra (400 mesh, f.o.b. works, bulk	ton.	32.00	@40.00
Smalt, blue, barrels	lb.	.06 @	.07
extra velvet black, barrels	lb.	.05 @	.06
Soapstone, powdered, f.o.b. mines, bags	ton.	15.00	@22.00
Talc, American, Eastern, f.o.b. mines, bulk	ton.	16.00	@18.00
French, bags	ton.	18.00	@22.00
high-grade, bags	ton.	40.00	@45.00
Italian, bags	ton.	50.00	@55.00
Talc, fibrous, car lots, works, bags	ton.	15.00 @	—
spot, car lots, bags	ton.	20.00 @	—
less car lots	ton.	25.00 @	—
Western, mines, bulk	ton.	18.00	@25.00
Terra alba, Am. No. 1, mills, bags or barrels	100 lbs.	1.15	@ 1.75
No. 2, bags or barrels	100 lbs.	1.50	@ 2.00
Imported, bags	lb.	.02 @	.02¼
Tripoli, car lots, bags	lb.	.01¾@	.02
Whiting, domestic, bags or barrels	100 lbs.	1.00 @	—
English cliffstone, bags	100 lbs.	1.50 @	—
paris white, bags	100 lbs.	1.25	@ 1.50
Imported, commercial, bags	100 lbs.	.85	@ 1.00
ton lots, bags	ton.	14.00 @	—
ex dock, car lots, bags	ton.	12.00	@16.00
gilders', bolted, bags	100 lbs.	1.25	@ 1.35
extra bolted, bags	100 lbs.	1.40	@ 1.50

Driers

(Packed in Barrels)

Aluminum, oleate, precip.	lb.	.21 @	.21¼
palmitate, precipitated	lb.	.28 @	.28½
resinate, precipitated	lb.	.16½@	.17
stearate, precipitated	lb.	.24 @	.24½
Calcium, resinate, precipitated,	lb.	.16 @	.16¼
stearate, precipitated	lb.	.24 @	.24½
Cobalt, acetate	lb.	.85 @	.90
carbonate	lb.	1.75 @	1.85
hydrate	lb.	2.25 @	2.30
linoleate, paste	lb.	.42 @	.42½
solid	lb.	.49 @	.50
resinate, fused, A	lb.	.12½@	—
1 p. c.	lb.	.11⅝@	—
2 p. c.	lb.	.16 @	.16¼
3 p. c.	lb.	.17 @	.17¼
precipitated	lb.	.42 @	.42½
Copper oleate, precipitated	lb.	.28 @	.28½
resinate, precipitated	lb.	.18 @	.19
stearate, precipitated	lb.	.30½@	.31
Lead linoleate, solid	lb.	.26 @	.26½
resinate, precipitated	lb.	.18 @	.18½
fused	lb.	.09 @	.10
Manganese borate, hign grade,	lb.	.19 @	—
technical	lb.	.15 @	.16
linoleate	lb.	.21 @	.21½
oxide, 85 percent	lb.	.04 @	.04½
resinate, fused	lb.	.08¼@	.08¾
precipitated	lb.	.13½@	.14¼
sulphate, anhydrous	lb.	.68¼@	.08½
Zinc resinate, precipitated	lb.	.14¼@	.14½
fused, dark, hard	lb.	.08¾@	.08½
stearate, precipitated	lb.	.22½@	.23

Glues

Common, bone, barrels	lb.	.17 @	.18
Fish, liquid, barrels	gal.	1.90 @	2.35
French, barrels	lb.	.21 @	.26
Hide, cabinet, high grade, barrels	lb.	.24 @	.28
low grade	lb.	.21 @	.25
White, extra, barrels	lb.	.22 @	.29
medium, barrels	lb.	.21 @	.27

Metal Leaf

(In packages of 20 books—500 leaves)

Aluminum, 5½x5½ in.	per pkg.	1.50 @	—
Composition, 5½x5½ in.	per pkg.	1.50 @	—
Gold, XX deep, 3⅜x3⅜ in.	per pkg.	10.50	@12.00
imported	per pkg.	10.25	@10.50
3⅜x3⅜ in.	per pkg.	11.50	@13.00
4 x4 in.	per pkg.	14.50	@14.70
3⅜x5 1/16 in.	per pkg.	17.50	@18.50
3 1/16x5⅞ in.	per pkg.	18.25	@19.20
Silver, 3⅜x3⅜ in.	per pkg.	2.25	@ 2.75

(Note:—All of the above quotations apply to domestic leaf, unless otherwise specified.)

Window Glass

United inches		Bracket sizes	Single AA	Single A	Single B
25	6x8 to 11x14	to	10x15	$24.00	$20.00	$19.00
34	12x13	to	14x20	25.00	21.00	20.00
40	10x26 to 18x22	to	16x24	27.00	22.50	21.00
50	20x20	to	20x30	28.00	23.70	22.00
54	15x26	to	24x30	29.00	24.50	22.50
60	26x28	to	24x36	30.00	26.00	23.25
70	26x34 to 32x33	to	30x40	32.00	28.75	25.25
80	34x36	to	30x50	36.50	32.25	28.75

United inches		Bracket sizes	Double AA	Double A	Double B
25	6x8 to 11x14	to	10x15	$32.00	$28.00	$26.50
34	12x13	to	14x20	25.00	31.00	29.00
40	10x26 to 18x22	to	10x24	39.00	34.00	31.00
50	20x30	to	20x30	42.00	37.00	34.50
54	15x36	to	24x30	43.00	38.00	35.00
60	26x28 to 26x34	to	24x36	44.00	39.00	35.50
70	28x32 to 30x30 to 32x33	to	30x40	47.00	42.00	38.00
80	34x36	to	30x50	51.00	46.00	41.50
84	30x32	to	30x50	52.00	47.00	42.50
90	3 x56	to	34x56	55.00	50.00	46.00
94	34x58	to	34x60	56.00	51.00	47.00
100	36x60	to	40x60	66.00	60.00	56.00

The schedule of discounts applying to the above quotations follow:—

For Zones B, C, D, E and F:—Single strength, "B" quality, 25-inch bracket sizes, 88 percent; all brackets above this size, 89 percent; double strength, "B" quality, all brackets, 88 percent.

For "A" quality, single strength and double-strength glass, in all of the above-named zones, the discounts will be two points higher than those named for "B" quality.

All prices on "Off quality" glass, which includes Fourth and "C" qualities, have been withdrawn by the manufacturers and will be quoted only upon application.

Prices for flat window glass in Zones D and E are not guaranteed against declines up to date of shipment, as they formerly were.

In Zones B, C and F prices for flat window glass for each of these zones are guaranteed against decline up to date of shipment.

The territory embraced in each zone is defined by manufacturers as follows:—

Zone A—Comprises the States of California, Oregon and Washington.

Zone B—Comprises the States of New Mexico Arizona, Colorado, Utah, Nevada, Wyoming, Idaho and Montana.

Zone C—Comprises the States of Texas, Oklahoma, Kansas, Arkansas and Louisiana.

Zone D—Comprises the New England States.

Zone E—Comprises all territory within 100 miles of the Atlantic or Gulf Seaboard outside of New England, Louisiana and Texas.

Zone F—Comprises the remainder of the United States not included in Zones A, B, C, D and E.

Hereafter the following boxing charges will apply in all zones except Zone A, on all orders for single-strength and double-strength class:—First three bracket sizes, 10c. to 50-inch box; above sizes, up to and including 100 united inches, 20c. per 50-inch box; sizes over 100 united inches, 40c. per 100-inch case; for glass packed 100 inches to the case the charges will be double the amount charged for the same size packed 50 inches to the box.

The following fractional cutting charges will apply:—Single strength, 1 fraction, 25c. per 50-inch box; 2 fractions, 50c. per 50-inch box; double strength, 1 fraction, 35c. per 50-inch box; 2 fractions, 70c. per 50-inch box.

Sherwin-Williams Honors Canadian Veteran Workers

Checks for $1,000 each, gold watches and certificates of membership in the Sherwin-Williams Old Guard were presented to a dozen employees of the Sherwin-Williams Company of Canada, Ltd., at a luncheon tendered to the staff by the company, September 5, at Montreal. Membership in the Old Guard is granted only after twenty-five years of continuous service. The Old Guard today numbers sixty-seven members.

The new members of the Old Guard are:—S. A. Benson, foreman, varnish factory; James Berry, foreman, filling department "B;" J. Bradley, superintendent, Red Mill; R. Cluxton, manager, Canada Paint; E. A. Crawford, chief clerk (sales department) Canada Paint; H. H. Eager, manager, western district, Sherwin-Williams; A. L. Hellems, representative, Canada Paint; Charles Knox, superintenden, Carter White Lead; A. R. Lethem, foreman, dry color works; E. Neaugheaur, engineer, Sherwin-Williams, Winnipeg; Joseph Oshmera, paint factory; R. Tiemersman, general foreman, Carter White Lead.

L. H. Carpenter, for the past ten years a salesman for the Tousey Varnish Company, Chicago, has been appointed sales manager.

Fred L. Somers, of the Fred. L. Lavanburg Company, this city, was back at his desk September 10 after a week's vacation in New England.

The Greenhow lead mines, Northwest Yorkshire, England, which have been idle for many years, are now again being worked with success.

The eastern division of the National Glass Distributors' Association will hold its fall meeting at the Traymore Hotel, Atlantic City, September 19 to 21.

Alexander Joseph of the Pfeiffer Color & Chemical Company, this city, is expected back about October 1 from a Scandinavian cruise. He has been away since July 2.

Dr. John Kirby, for six years general superintendent of the Glidden Company factory at St. Louis, has been transferred to San Francisco to assume a similar position.

W. S. Fallis, president of the Sherwin Williams Company, of Canada, Ltd., and Mrs. Fallis sailed from Quebec, September 13, on the "Empress of Australia," for Europe.

Fred S. Slater, for several years with George D. Wetherill & Co., Inc., Philadelphia, has become manager of the technical paint division of the M. J. Merkin Company, Inc., this city.

I. L. Darling, of France, Campbell & Darling, varnish gum importers and ester gum manufacturers, this city, returned September 13 from a week's business trip to Pennsylvania markets.

F. L. Browne, of the Forest Products Laboratory, United States Department of Agriculture, is on a tour of inspection of paint-test fences in the Southwest and up the Pacific coast.

The Bachellor Paint Company has been incorporated in Boston with 1,000 shares of no par value stock. George W. Bachellor, former president of the Gould & Cutler Corporation, is president.

R. M. Roosevelt, vice president of the Eagle-Picher Lead Company, in charge of the company's office in this city, returned September 13 from a business trip of several days to the Chicago office and the Hillsboro plant.

Louisville, Ky.—William J. Yager, sales manager of the Jones Dabney Co., Louisville, is back at the office after a motor vacation with Mrs. Yager to the East, visiting New York, Atlantic City and other points.

Employees of Wadsworth, Howland & Co., Boston, have organized a welfare association with officers as follows: President, George Hodgson; vice-president, Ben Mayo; secretary, Miss Ida Dwyer; treasurer, O. W. Anderson.

James E. Grimes, president of the Metropolitan Paving Company, has succeeded M. J. Schneider as president of the National Cantube Company, manufacturer of a new container product used in the grease and paint trades, Chicago.

Plans are complete for construction of an electrolytic zinc plant at East St. Louis, Ill., by the Evans-Wallower Lead Company, producer of zinc in the Tri-State district. The plan will be operated by a subsidiary, the Evans-Wallower Zinc Company.

E. J. Probeck, production manager for the Jones Dabney Company, lacquer and varnish manufacturer, Louisville, is on a trip East with Mrs. Probeck, and among other things attended the meeting at Swampscott, Mass., of the American Chemical Society.

Elmer H. Hancock, vice-president of the Louisville Varnish Company, Louisville, and Maurice J. Eble, head of the railroad department of the company, were in Montreal last week attending the annual convention of the Railroad Master Painters' Association of the United States and Canada.

The Jones Dabney Company, lacquer and varnish manufacturers, Louisville, today placed in operation a new plant at Detroit, to produce lacquer. The company is now serving a dozen or more of the larger automobile manufacturers, and decided to establish a special plant at Detroit to take care of the automotive business in that territory.

The Lampton Crane & Ramey Company and the Sterling Paint & Color Company, allied organizations, Louisville, were busy last week moving the businesses from Fifteenth and Lytle streets to a new plant at 1213 Story avenue, which formerly housed the old Magic Soap Co., now out of business. Machinery and equipment is being moved in sections, without stopping production.

Cleveland Paint Golfers

Twenty-five members of the Cleveland Paint, Oil and Varnish Club met at the Westwood Country Club, Cleveland, September 7 for a golf tournament.

The prize for low gross went to C. A. Smith and Herbert Schneider carried away the prize for low net.

Eighteen members stayed for dinner at the club, and discussed where the next tournament should be held. It was planned for the Canterbury Country Club, September 21.

Eagle-Picher Wins Suit Involving Mining Leases

CHICAGO, Sept. 12, 1928.

United States District Court Judge F. E. Kennamer has handed down a decision which upholds the validity of the Eagle-Picher Lead Company's lead and zinc leases in the Quapaw Indian Reservation in Oklahoma. According to A. E. Bendelari, president, several million dollars' worth of properties were involved in the suit, which was instituted in the names of a number of Indian plaintiffs.

The leases involved in the legislation are understood to be in and about the company's development at Picher, Okla.

Window Glass Costs Told At Tariff Board Hearing

WASHINGTON, Sept. 14, 1928.

Hearings closed today before the United States Tariff Commission in its investigation of the foreign and domestic costs of producing crown, cylinder and sheet glass being made on application of American window glass producers for an increase in duty under section 315 of the tariff act of 1922.

During the hearings, which lasted four days, the commission heard discussed the entire process of making glass by different methods and the methods of selling it as well as analyses of all items of cost to producers in the United States and in Belgium, the principal competing country.

W. L. Monroe, president of the American Window Glass Company, Pittsburgh, presented the case for domestic manufacturers, acting both as counsel and as principal witness. John R. Rafter, New York, appeared as counsel for the Belgian companies, using the Fourcault sheet drawing process, and for the Vitrea Glass Works Company, Ltd., Prague, makers of the very thick or crystal sheet glass.

Briefs are to be exchanged between the parties by October 4 and filed with the commission, together with reply briefs, by October 15.

Chicago Paint Club to Open Season Sept. 25

CHICAGO, Sept. 13, 1928.

Arrangements for the part which the Chicago club will take in the affairs of the N. P. O. & V. A. convention at Detroit will be made at the first fall meeting of the Chicago Paint, Oil and Varnish Club, to be held September 25 at the Chicago Athletic Association. Delegates to the convention will be:—Mrs. L. S. Haines, Arthur Dole, Jr., E. L. Furman, John L. Requa, H. S. Edwards, C. H. Praeger, Charles Novak, F. A. Gregory, W. S. Hayt, John G. Schroeder, L. R. Van Allen, Edward L. England, F. S. Coates and E. J. Lewis; alternates, James B. Day, H. P. McGowan, Wells Martin, W. E. Maston, S. H. Stewart, L. E. Morgan, R. S. Solinsky, Harold Watson, V. F. Ridgway, Robert Carey, J. F. Slapak, E. T. Stille, L. D. Williams and Harry Wood.

H. A. Pinney, chairman of the entertainment committee, has planned some unusual entertainment features for the club meeting.

National Lead Company Sales Executives Meet

Sales executives from the principal branches of the National Lead Company gathered at the headquarters office, this city, September 14 and 15, for the regular quarterly meeting of the sales committee. Various problems dealing with the advertising and marketing of the company's products came up for discussion.

Fred M. Carter, vice-president, presided at the meetings. Those in attendance at the two-day meeting were L. T. Beale, Philadelphia; W. G. Elsbee, Chicago; G. A. Coleman, Chicago; A. S. Curtis, Boston; W. A. Dail, Cincinnati; C. F. Foerstner, Cleveland; O. H. Greene, St. Louis; F. A. Gregory, Chicago; R. L. Hallett, this city; W. Knust, this city; J. G. C. McNair, this city; R. W. Melville, Buffalo; W. H. Taylor, Pittsburgh; A. W. Scott, San Francisco; Harold Rowe, Fletcher W. Rockwell, W. C. Beschorman, and H. G. Sidford, all of this city.

Horgan in Detroit

George V. Horgan, general manager of the National Paint, Oil and Varnish Association and the American Paint and Varnish Manufacturers' Association, was in Detroit several days last week, conferring with the local committee in preparation for the national meetings. He reports that enthusiasm and well-organized work indicate that the Detroiters will reach their goal of 1,000 at the convention. The arrangements already promise a smooth-running convention in every detail.

The Carter White Lead Company, Chicago, has appointed H. D. Moore a member of its sales staff and assigned him to the Chicago city district.

Charles H. Webb, technician for the Eagle Picher Lead Company, Chicago, is enjoying a belated vacation at the Webb camp near Oregon, Ill., with Mrs. Webb, who recently returned from a several months' tour of the west.

Naval Stores

Rosin Recovers After an Early Decline—Small Changes in Turpentine—Stocks Increase —Local Business Fair

The local market for naval stores was fairly active last week, although purchasing was generally on a conservative scale. Orders for moderate quantities were received in a fair volume, however, from local and outside consumers. Turpentine and rosin showed irregularity, the tone being easier early in the week and firmer later on in company with Southern markets.

Daily changes in primary turpentine quotations were rather small, the range between the highest and the lowest prices of the week at Savannah and Jacksonville being 1c. per gallon. There was a fairly active demand in Southern markets from domestic buyers although little improvement was reported in export business. Changes in foreign quotations were narrow.

Although export business in turpentine recently has not been as large as some had expected, the movement into consuming channels in this country is apparently holding up well and in the opinion of some consumption is larger than at this time last year as a result of the low prices that have prevailed for some time past.

Receipts of turpentine in the three principal markets in the South from the opening of the season to the close of the first week of the current month were about 35,000 barrels smaller than in the same time last year and there are some who look for a further decrease in the movement as compared with last year during the next few weeks.

Rosin prices declined in Southern markets early in the week and then recovered with a good inquiry for all grades from domestic buyers. There were also reports of an improved export inquiry.

Receipts of rosin in Southern markets were rather liberal while the outward movement was comparatively small and primary stocks showed an increase for the week.

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Turpentine

The local market for turpentine was fairly active last week although business showed some decrease as compared with the previous week, a decline in primary markets early in the period making consumers disposed to hold off for further developments. Changes in prices were narrow, quotations at the close of the week being unchanged at 52c. to 53c. per gallon. Variations in primary quotations were narrow, the tone of the markets being easier early in the week and steadier later on. There was a fairly active demand in primary centers. Steam distilled wood turpentine continued to be quoted by one producers at 47c. per gallon, f.o.b. Southern distributing points.

Savannah Turpentine

SAVANNAH, Sept. 14, 1928.

There was a fairly active demand for turpentine. Price changes were moderate. Following is a record of the market for the week:—

	Price per gal.	Barrels Sales.	Receipts.	Shipments.	Stocks.
Saturday	$0.46½	313	614	...	23,947
Monday	.46	300	476	1,026	23,397
Tuesday	.45¾	941	1,357	287	24,467
Wednesday	.45½	604	472	...	24,939
Thursday	.46¼	326	592	278	25,253
Friday	.46½	490	474	324	25,403

Jacksonville Turpentine

JACKSONVILLE, Sept. 14, 1928.

Changes in turpentine quotations were comparatively small, the market having a steady tone. Following is a record of the market for the week:—

	Price per gal.	Barrels Sales.	Receipts.	Shipments.	Stocks.
Saturday	$0.46½	265	375	350	31,323
Monday	.46	100	300	408	31,215
Tuesday	.45¼	365	539	30	31,724
Wednesday	.45¾	84	535	580	31,679
Thursday	.45½	746	454	240	31,893
Friday	.48	171	396	497	31,792

Pensacola Turpentine

PENSACOLA, Sept. 11, 1928.

The movement of turpentine was moderate and the market had a steady tone. Following is a record of the market for the week:—

	Barrels Receipts.	Shipments.	Stocks.
Wednesday	651	261	21,856
Thursday	183	281	21,758
Friday	155	283	21,430
Saturday	164	321	21,473
Monday	9	122	21,360
Tuesday	425	323	21,462

Chicago Turpentine

CHICAGO, Sept. 14, 1928.

Buyers' decision to take advantage of the lower prices on turpentine existing recently led to a brisker business and carried prices a shade higher in the Chicago market, although the improvement seemed to be of a minor nature. Heavy receipts in the South still overhung the market and apparently prevented much advance. Ruling quotations per gallon, at the close of business last night, were:—Five-drum lots, 52c.; single drums, 57c.; five-barrel lots, 57c.; single barrels, 62c.

English Turpentine Prices

Quotations on turpentine in London and Liverpool during last week were:—

	Per cwt. in barrels London. s.	d.	Liverpool. s.	d.
Saturday	41	0	43	0
Monday	41	6	43	0
Tuesday	41	6	43	0
Wednesday	41	3	42	9
Thursday	41	3	42	9
Friday	41	9	42	9

Current prices on naval stores, formerly printed on page 4, are now printed at the end of this market report.

London Turpentine Stocks

Stocks of American turpentine in London September 13 were 34,314 barrels.

Rosin

Business in rosin in the local market was on a moderate scale last week. Prices showed irregularity in company with Southern markets, the trend being downward early in the week with an upturn later. At the close of the week quotations were $9.35 to $10.90 per unit, acording to grade, against $9.25 to $10.90 at the previous week end. Weather conditions in the South were generally more favorable and receipts at primary points were liberal. Stocks showed an increase for the week, the outward movement being small.

Savannah Rosin

SAVANNAH, Sept. 14, 1928.

There was a good demand for all grades of rosin and the market was steady. Following is a record of the market for the week:—

	Price per unit—Low of range quoted Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
B	$7.80	$7.70	$7.65	$7.65	$8.00	$8.05
D	7.80	7.70	7.65	7.65	8.00	8.05
E	7.80	7.70	7.65	7.65	8.00	8.05
F	7.80	7.75	7.65	7.65	8.00	8.05
G	7.80	7.75	7.65	7.65	8.00	8.05
H	7.80	7.75	7.65	7.65	8.00	8.05
I	7.80	7.75	7.65	7.65	8.00	8.05
K	7.80	7.75	7.65	7.65	8.00	8.05
M	7.85	8.00	7.75	7.75	8.05	8.10
N	7.95	8.10	8.00	8.00	8.15	8.20
W. G.	8.95	9.00	8.90	8.90	9.15	9.25
W. W.	9.20	9.20	9.15	9.15	9.30	9.35
X	9.20	9.20	9.15	9.15	9.30	9.35
	Barrels					
Sales	1,406	1,532	1,845	700	599	1,420
Receipts	2,425	1,834	4,806	1,542	2,188	1,651
Shipments	...	2,420	184	...	1,863	...
Stocks	127,131	126,454	131,167	132,709	133,034	134,675

Jacksonville Rosin

JACKSONVILLE, Sept. 14, 1928.

Receipts of rosin were liberal. Demand from domestic buyers was good. Following is a record of the market for the week:—

	Price per unit—Low of range quoted Sat.	Mon.	Tues.	Wed.	Thurs.	Fri.
B	$7.80	$7.60	$7.65	$7.65	$7.65	$7.65
D	7.80	7.60	7.65	7.65	7.65	7.65
E	7.80	7.60	7.65	7.80	7.80	8.00
F	7.80	7.60	7.65	7.80	8.00	8.00
G	7.80	7.60	7.65	7.80	8.00	8.00
H	7.80	7.60	7.65	7.80	8.00	8.00
I	7.80	7.60	7.65	7.80	8.00	8.00
K	7.80	7.60	7.65	7.80	8.00	8.05
M	7.80	7.60	7.65	7.80	8.00	8.10
N	7.95	7.85	7.90	8.00	8.15	8.20
W. G.	9.00	8.85	8.90	9.00	9.15	9.25
W. W.	9.25	9.10	9.25	9.15	9.30	9.35
X	9.25	9.25	9.25	9.25	9.30	9.40
	Barrels					
Sales	1,846	752	1,580	1,446	1,097	1,290
Receipts	1,064	1,094	1,912	1,723	1,457	3,402
Shipments	105	129	3,715	2,041	100	2,636
Stocks	87,611	88,576	86,773	86,455	87,812	88,528

Pensacola Rosin

PENSACOLA, Sept. 11, 1928.

The market for rosin was steady with a fairly active trade. Following is a record of the market for the week:—

	Barrels Wed.	Thurs.	Fri.	Sat.	Mon.	Tues.
Receipts	1,967	533	411	326	79	1,466
Shipments	500	400	250	155	120	200
Stocks	24,410	24,546	24,709	24,880	24,959	26,225

(Continued on page 32)

Valuable information on Imports and Exports of Naval Stores is given in port lists beginning on page 5.

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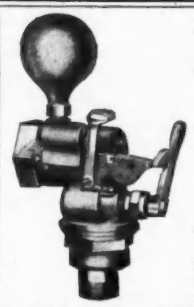
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Bracing sea air balmy enough to invite a dive in the ocean by day . . . Crisp enough to welcome a dive under blankets at night. Golf . . . Tennis . . . The Boardwalk to make you forget care . . . And The Ambassador to remind you how well a hotel can care for its guests.
With Nature offering her best creations . . . with The Ambassador doing its best for your creature comforts . . . the combination is unbeatable.
Check the calendar and your bag . . . and check that idea about "not having time". You have.
The Ambassador
ATLANTIC CITY

Chicago Rosin

CHICAGO, Sept. 14, 1928.

After hitting a low price level, rosin prices came back somewhat in the Chicago market by virtue of buying from those wishing to take advantage of the depression to fill requirements. The advance from the low was around 15 points on most grades. Differences of opinion exist over the immediate trend of the market. Ruling quotations per unit of 280 pounds at the close of business last night were:—B grade, $10.15; G grade, $10.30; M grade, $10.35; W.W. grade, $11.65.

London Rosin Prices

Quotations on rosin per hundredweight in barrels in London during last week were:—

	Common.		Water white.		Type G.	
	s.	d.	s.	d.	s.	d.
Saturday	20	9	26	0	20	9
Monday	20	9	26	0	20	9
Tuesday	20	9	26	0	20	9
Wednesday	20	9	26	0	20	9
Thursday	20	9	26	0	20	9
Friday	20	9	26	0	*20	9

Liverpool Rosin Prices

Quotations on common rosin in Liverpool last week were as follows:—

	Per cwt. In barrels.	
	s.	d.
Saturday	21	0
Monday	21	0
Tuesday	21	0
Wednesday	21	0
Thursday	21	0
Friday	21	0

Other Naval Stores

Pine Oil.—Business was of a conservative character, the demand for moderate quantities being fairly active. The market continued to be characterized by a steady tone.

Pitch.—Reports were current of a somewhat better inquiry from local and outside buyers but consumers were not inclined to anticipate. The market was firm.

Rosin Oil.—Demand from consumers lacked snap but a rather better inquiry was noted in some quarters. Consumption is apparently up to normal for this period.

Tar.—The market was steady with a fair demand but aside from this the situation lacked new features of importance. Former quotations remained in effect.

Current Prices

(For late price changes, see page 2)

Turpentine spirits, gum ex-yard.			
barrels	gal.	.52 @	.53
wood, destructive distillation,			
barrels	gal.	.35	Nom.
steam distilled, drums	gal.	.47 @	.48
Rosin (prices on spot per unit of 280 lbs.)—			
gum, B, barrels		9.35 @	—
D, barrels		9.35 @	—
E, barrels		9.40 @	—
F, barrels		9.40 @	—
G, barrels		9.40 @	—
H, barrels		9.40 @	—
I, barrels		9.45 @	—
K, barrels		9.45 @	—
M, barrels		9.50 @	—
N, barrels		9.60 @	—
W.G., barrels		10.50 @	—
W.W., barrels		10.90 @	—
wood		7.55 @	—
f.o.b. works		6.75 @	—
Gum thus, barrels		19.00 @	—
strained, barrels		19.00 @	—
Pine oil, steam distilled, straw color, barrels	gal.	.63 @	.64
water white, barrels	gal.	.66 @	.67
Pitch, barrels	bbl.	8.00 @	8.50
Rosin oil, first rectified, drums	gal.	.57 @	—
second rectified, drums	gal.	.60 @	—
third rectified, drums	gal.	.68 @	—
Tar, kiln burned, barrels	bbl.	12.50 @	13.00
retort, barrels	bbl.	12.50 @	13.00
Tar oil, commercial, barrels	gal.	.42 @	—
refined, barrels	gal.	.50 @	—

Naval Stores Produced at Steam and Solvent Plants

WILMINGTON, Sept. 10, 1928.

July production of naval stores by steam-distillation and solvent treatment of wood, and stocks of these products on hand August 31, according to data collected by J. E. Lockwood, manager of the naval stores division of the Hercules Powder Company, were as follows:—

Production

	500-lb. bbls. Rosin.	Gallons—Turpentine.	Gallons—Pine oil.
Month of August	37,623	313,714	225,668
Total from April 1, 1928	181,560	1,533,987	1,145,833

Stocks at Plants

Total, August 31, 1928	114,074	344,781	822,813
Total, March 31, 1928	98,101	543,114	693,522

Steam-distilled and solvent wood products represent, normally, about 19 percent of the total production of naval stores in the United States. Gum products are about 80 percent; products of the destructive distillation of wood, 1 percent.

J. A. G. Carson, president of the Carson Naval Stores Company, Savannah, is on vacation at Atlantic City.

J. C. Nash, president of the Columbia Naval Stores Company, Savannah, who went abroad early in September, is expected back about October 1.

G. A. Wharry & Co., 25 Beaver street, has been appointed New York sales representative for the Naval Stores Marketing Corporation, Savannah and Jacksonville.

N.Y. Paint Club Meets

(Continued from page 17)

New Members Welcomed

Ivan D. Hagar, chairman of the membership committee, had six applications, as follows:—

Miner-Edgar Chemical Corporation, Jersey City; Frederic P. Robert, representative.

Monsanto Chemical Works, this city; Rutledge P. Wilhelm, representative.

Boston Varnish Company, Brooklyn; W. D. Kennedy, representative .

James W. Byrnes Shellac Company, this city; Philip H. Harris, representative.

Bisbee Linseed Company, this city; E. G. Reuther, representative.

American Cyanimid Company, this city; E. J. Barber, representative.

All were elected to membership by unanimous vote, President Morpeth welcoming into the club Messrs. Harris and Wilhelm, who were present.

D. H. Litter, secretary, read the following telegram from R. A. Plumb, president of the Detroit Paint, Oil and Varnish Club:—

At your meeting of Thursday evening we will greatly appreciate your extending in behalf of the Detroit Club a most earnest and cordial invitation to every single member of the New York Club to attend the coming convention in Detroit. Our convention committees are working hard to provide entertainment which, combined with an especially important business program, should make the Detroit convention one of particular interest and unusual profit to every member of the club. We will be exceedingly grateful for a most generous response from the New York Club to make possible the realization of our ambition to have a minimum of 1,000 registered at the Detroit convention. The St. Louis, Cleveland and Chicago clubs have assured us of a record-breaking attendance and, with the same enthusiastic response from your great club, we can be assured of a convention that will make history in the records of our association.

Mr. Morpeth instructed Mr. Litter to forward to the Detroit club, a reply, "A telegram that will sustain and intensify the enthusiasm of the Detroit club."

Charles F. Guignon, chairman of the entertainment committee, asked for suggestions from members for the type of entertainment it desires, asking particularly for help in deciding upon what favors shall be presented at the annual ladies' night meeting in January.

J. G. C. McNair, chairman of the acquaintance committee, announced that the committee had adopted a suggestion that at future meetings it delegate one member at each table to help its work and see to it that all at each table became acquainted.

Alabama Law Explained

Arthur S. Somers, chairman of the club's committee on legislation, and holding a similar post with the central legislation committee of the National Paint, Oil and Varnish Association, and the American Paint and Varnish Manufacturers' Association, was scheduled to speak on legislation, with particular reference to the new Alabama paint law, requiring a payment of one cent per gallon on paint from "the person first selling the paint in the state." Mr. Somers was prevented by illness from attending the meeting. George V. Horgan, of the N. P. O. and V. A., explained how the Alabama law had been "slipped over" without the knowledge of the legislative committee and the failure of the reporting agency to detect the provisions in the bill in time to notify the association. He declared that the legislative committee of the association was working for a repeal of the law, and was sanguine of success.

J. J. A. Winzinreid, chairman of the club's traffic committee and a member of the joint committee of the two associations, addressed the members on the lacquer freight classification case, which will be argued before the Interstate Commerce Commission September 21. He reported that the local trade had held a well-attended meeting September 12 regarding the question, and had furnished the committee with considerable valuable data for use in connection with the arguing of the case.

Naval Stores Act

Andrew L. Somers, representative in Congress from a Brooklyn district, was scheduled to talk on a proposed amendment to the Naval Stores Act, but was called out of town prior to the meeting and was unable to appear. The effect of the proposed amendment, sponsored by both of the major associations, is to clarify a departmental ruling by interpretation of the language used in Section 5, paragraph "C," which at present prohibits the use of the word "turpentine" in selling and offering for sale anything other than naval stores of the United States standards. The effect of the passage of the amendment is intended to clarify the departmental interpretation and make possible the use of turpentine, not prohibit its use, a paragraph on the docket for the meeting explained.

W. R. McComb, business manager of the Save the Surface Campaign, outlined the scope of the business training course which the organization has prepared, and reported material progress already made in this work. The course, he said, will be made available to manufacturers' salesmen for $25 per year, with a $12 charge to be made to salesmen in retail stores. This training course, he added, is distinctly a new movement and affects every branch of the industry. He asked the co-operation of the trade in this city in putting over the training course campaign.

R. W. Emerson, executive secretary of the Clean-up and Paint-up Campaign, had a large and interesting display of the publicity work which has attended the campaign this year. He declared that new proposals for utilizing the machinery of this arm of the industry are always coming up. Under consideration at the moment, he said, is one which involves the 14,000 clubs of the National Federation of Women's Clubs. Mr. Emerson asked members of the New York club for prompt response to the campaign for underwriting the campaign during the coming year, adding that an "Honor Roll" of contributors will be made up by September 29 and published later.

Convention Plans

G. A. Wharry, chairman of the committee handling arrangements for the special train which will carry the trade from this city to the convention in Detroit next month, announced that the train, which will be known as the "New York Paint, Oil and Varnish Club Special," will leave Grand Central Terminal, October 14, at 5.10 p. m. He asked that checks covering the transportation charge be forwarded with each application for a reservation, adding that allottment of accommodations will be made in the order of checks received.

George V. Horgan, general manager of the N. P. O. and V. A., outlined some of the plans for the Detroit meeting. The meeting of the board of directors of the manufacturers' association on Monday morning will start the week's activities, followed by the usual formal meeting of the organization at 1.30 p. m. on the same day. The manufacturers will continue their business sessions into Tuesday.

Wednesday will be given over to the men's golf tournament. The directors of the National Paint, Oil and Varnish Association will hold an all-day session on that day. James B. Keister will give the annual president's dinner to the officers and directors at 1 p. m. on Wednesday.

The formal opening of the N. P. O. and V. A. meeting will be on Wednesday evening. Opening exercises will be brief, and a reception to Mr. and Mrs. Keister will wind up the evening.

Principal business sessions are scheduled for Thursday, when the various officers and committee chairmen will render their reports. The ladies' golf tournament, bridge games, etc., will also be held on that day.

Friday will witness the final business sessions, the annual banquet Friday evening winding up the convention.

Special efforts are being made this year to secure adequate representation of all member clubs at the business sessions, Mr. Horgan declared.

Features of the convention program will include Wallace Bennett of Salt Lake City, who will talk on the paint industry from the standpoint of the young man just entering the business, and Dr. Hugh P. Baker, of the United States Chamber of Commerce, in charge of a new department of that organization designed as the contact point between the chamber and trade associations.

D. H. Litter, secretary, announced that Ladies' Night this season will not be held until January 24, the club having been unable to arrange for suitable hotel accommodations in January before that date.

W. R. Morpeth, president, spoke briefly on the recent death of Carl Merz, and the assemblage stood a moment in silence in tribute to the memory of Mr. Merz. Mr. Morpeth announced that suitable condolences had been extended by the club to the family of Mr. Merz.

Paint Scholarships

Mr. Morpeth next took up the question of the founding of nine scholarships in paint technology, and announced that the committee which had investigated the question had recommended that the club found the scholarships, and that the courses be at Pratt Institute, Brooklyn. C. W. Griffin was chairman of the committee having the matter in charge, assisted by Ivan D. Hagar and J. W. Bossert. The executive committee had approved the committee recommendation, Mr. Morpeth added, and called for a vote by members, who unanimously approved the founding of the scholarships. The work will cost the club about $675 yearly, Mr. Morpeth declared, and the scholarships are open to the employes of any of the plants in the vicinity of metropolitan territory. The executive committee has formulated conditions upon which the scholarships may be awarded, and has secured the co-operation of Dr. Allan Rogers, of Pratt Institute, who will pass on the applicants. The course will be for a three-year period, and will be at the evening sessions of the institute.

D. H. Litter, secretary, announced that at the meeting of delegates and alternates, held prior to the business meeting, W. R. Morpeth had been chosen chairman of the delegates from the New York club to the national convention. H. M. Howard being elected vice-chairman. The choice of Mr. Morpeth, it was explained, was in line with the policy adopted by many local clubs this year of having their presidents in charge of convention delegations.

Mr. Morpeth called for a pledge from all delegates selected to attend the business sessions. The list of delegates and alternates follows:—

Delegates:—J. W. Armitage, H. L. Calman, H. S. Chatfield, F. P. Cheesman, A. W. Dodd, A. G. Fairweather, D. W. Figgis, C. W. Griffin, Glen Haskell, M. L. Havey, E. F. Hopper, D. H. Litter, W. R. Morpeth, D. W. Mulford, R. W. Murray, H. W. Pearson, W. J. Robertson, J. W. Robson, R. M. Roosevelt, C. J. Roh, H. J. Schnell, H. G. Sidford, H. Uehlinger, R. O. Walker, H. L. Wilkinson, Harry Woolsey.

Alternates:—H. F. Colcord, R. C. Cox, O. J. S. de Brun, W. H. De Camp, Jr., L. C. Breen, C. F. Guignon, R. W. Hafner, H. E. Hendrickson, Emil Hoefle, H. M. Howard, V. H. Hunter, Robert ursh, S. Klein, A. Klipstein, George C. Lewis, L. Martin, Jr., J. J. Mangin, J. A. McNulty, H. A. Passof, F. W. Rockwell, Harold Rowe, G. H. Tomlinson, S. W. Thompson, B. R. Tunison, F. J. Van Vranken, aCri Watter.

In reply to a question from the floor, George V. Horgan spoke briefly on the work of the cost accounting bureau of the national organization, and suggested more general utilization of the services of this bureau by firms in the trade.

Misbranding Discussed

Under the heading of new business, H. G. Sidford asked for information from any one present as to what was being done to combat false and misleading paint advertising. Lee B. Judson, of the national association, declared that in the only case of the kind recently brought to the organization's attention, prompt action had been taken through the local Better Business Bureau in the city in which the advertiser did business, Cleveland, and that the misleading statements had been deleted from the advertising of the company involved.

E. F. Hopper propounded a similar question concerning misbranding of linseed oil. Mr. Judson declared that in the case of a complaint of this nature received by the national association investigation had disclosed that the offending labeling had been the work of one individual, who was conducting a linseed oil business, a paint business, and a lead business, under three different firm names. While the evidence disclosed by the investigation seemed to warrant action by the postal authorities, he declared, it was deemed more advisable to take the matter up with the individual involved, who promised to wind up the affairs of his three companies, and to remain out of the paint and varnish business entirely in future.

An interesting program of entertainment followed the conclusion of the business session. Entertainment was furnished by Clark's South Sea Islanders orchestra, Maryn Coslov, dancer; Lillian Wagner, soprano; Maurice, magician; and Nimura and Tanagara, dancers.

The meeting was adjourned about 10.45 p. m.

Zinc Stocks September 1

World stocks of zinc September 1 were as follows, according to the International Metal Service, London, foreign correspondent of the American Zinc Institute:—

	Metric tons.
United States	40,300
Canada	4,000
Germany-Poland	5,800
Belgium	5,600
France	900
Great Britain	1,100
Scandinavia	200
Other Europe	600
Australia (including afloat)	3,800
Far East	800
Elsewhere	2,000
Total	65,100

Gasoline Sold in Summer More Volatile Than in 1927

The motor gasoline marketed in the United States last summer was slightly more volatile than that sold a year ago, according to the United States Bureau of Mines, which recently completed its eighteenth semi-annual motor gasoline survey. The increase in volatility is shown by a lowering of the distillation temperatures, ranging from 2°F. at the average initial boiling point to 4°F. at the average end point.

In the past there has usually been a distinct difference between "summer" and "winter" gasoline, that marketed during the summer being less volatile than that sold during the winter. During several years this difference was very small and was confined to the lower end of the distillation range. Last summer the average figures indicate a decided return to the sale of a less volatile summer-grade gasoline, the change being especially evident in the samples from New York, Washington, Chicago, New Orleans, and St. Louis. This difference is most noticeable in the initial and 20 percent points. A study of the individual analyses, however, shows a general tendency toward the marketing of a standardized product, as indivisual variations from the average are small.

Although the gasoline marketed last summer is more volatile than that sold during the summer of 1927, it is less volatile than that marketed in January, 1928. There is a decided tendency toward beter fractionation in the manufacture of gasoline.

Gasoline Tax Law Model On Program of Officials

CHICAGO, Sept. 12, 1928.

A model gasoline tax law, involving a levy on sales of gasoline to the consumer, rather than on the volume of gasoline delivered to the dealer, will be presented for approval to the North American Gasoline Tax Conference at Memphis, October 1 to 3.

William A. McAtee, president of the conference, and state oil inspector of Missouri, is receiving comments on the proposed measure from various members of the organization, made up of administrative officers of the gasoline tax laws in the various states. Under the newly worked-out measure, the tax would be pad every three months instead of monthly as in most states at present.

J. W. Gradner, sales manager for the John T. Lewis Brothers Company, Philadelphia, was in this city September 13.

The Bradshaw-Praeger & Co., Chicago, has become a member of the Chicago Association of Commerce. The company manufactures shellac and varnishes.

The fall celebration of the "Nifty Niblicks," the fun-making group of the golf association of the Chicago Paint, Oil and Varnish Club, will be held at the Glen Flora Golf Club, Chicago, September 27.

Ivan D. Hagar, of the Titanium Pigment Company, this city, left September 14 on a nine weeks' business trip that will take him to many of the principal United States and Canadian markets.

G. E. Vasel, president of the Vasel Grinding Mills Company, Philadelphia, will address the meeting of the Paint and Varnish Superintendents' Club of Chicago at the Engineers' Club, Chicago, September 17. He will stress new methods of paint grinding. R. J. Knox will speak on design and equipment for a modern paint factory. C. F. Fawkes, Pyroxylin Products, Inc., will speak on the details of a modern lacquer department.

Flaxseed and Linseed OIL

Government Flaxseed Crop Estimate Reduced to 23,400,000 Bushels—Prices Advance—Receipts Larger—Oil Firmer

The principal development of the week in the markets for flaxseed and linseed oil was the publication of the monthly government crop report. This indicated a crop as of September 1 of 23,400,000 bushels against 24,500,000 bushels on August 1, 21,500,000 bushels on July 1 and 26,600,000 bushels last year. The condition of the crop was stated at 77.4 percent against 83.3 a month ago and 84.6 last year. The trend of seed prices in domestic markets was upward with cash product especially strong. Receipts at the Northwest were larger.

There were no shipments from Argentina to the United States last week against 260,000 bushels in the previous week and 220,000 bushels last year; since January 1, 10,024,000 bushels against 14,176,000 bushels last year. Shipments to all countries last week were 2,315,000 bushels against 1,901,000 in the previous week and 1,144,000 last year; since January 1, 55,872,000 bushels against 56,176,000 bushels last year.

Oil was firmer with a better demand. Cake and meal were steady.

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Flaxseed

DULUTH, Sept. 14, 1928.

Apparent shortage in expected yield of the flax crops of both the United States and Canada has given the seed a boom on the market and its strength is increasing daily, as crushers and others show a desire to get ready for a possible pinch in the future. Just what the ultimate effect will be is problematical, for crushers are chary about jumping too quickly to conclusions. That the Canadian report is approximately correct is quite apparent, due to the rather startling shortage from former years, for no matter what the actual figures may be, it is realized that a heavy shortage exists. Usually the Dominion turns out about 6,000,000 bushels but the recent report gives the yield this year no more than half that. Late seedings are expected to suffer on this side of the line, but just how much is, as yet, unknown.

The week's closing range was as follows:—

	Cash.	Oct.	Dec.
Saturday	$2.07¾	$2.07⅝	$2.09
Monday	2.09¾	2.09	2.09¾
Tuesday	2.12¼	2.09½	2.11
Wednesday	2.13⅝	2.12⅝	2.13¼
Thursday	2.15	2.12	2.12⅝
Friday	2.14⅝	2.11⅞	2.13½

Daily receipts and shipments of domestic seed during the week ending September 14, 1928, and in the corresponding week last year, were, in bushels:—

	Receipts 1928.	Receipts 1927.	Shipments 1928.	Shipments 1927.
Saturday	15,924	13,074	....	12,000
Monday	6,310	17,503	48,500	65,532
Tuesday	10,064	26,236	....	36,930
Wednesday	10,711	20,209	....	....
Thursday	24,714	23,221	....	....
Friday	12,972	33,870	....	....
Total	80,695	134,113	48,500	114,462
Previous week	83,145	37,698	94,240	....
From Aug. 1 to date	304,654	234,754	322,073	452,194
In public warehouses	115,609	343,777	....	....

Minneapolis Flaxseed

MINNEAPOLIS, Sept. 14, 1928.

The local flaxseed situation has shown real strength through the last week and the crushers are good buyers of the seed offered. Receipts of flax in the local market last week were the heaviest in a long time and totaled about 1,600 cars. Crushers and other buyers absorbed the large offerings very readily from day to day.

The seed is generally of the medium quality from Minnesota. Higher quality seed showing little moisture and large berry is scarce and in very good demand. Elevator buyers are taking the offerings of lower quality seed in good volume for cleaning purposes but are not as much a feature in the market as was expected. Local elevator buyers are buying the cash flax for outside crushers and are storing it in local elevators. Outside crushers are good buyers in the local market and some of the seed is being shipped for storage in private bins.

Premiums on the cash article are higher than last week and demand is tightening up very readily. Spot No. 1 seed quoted at September price to 4c. over, fancy quality at 5c. over the option.

The week's closing range was as follows:—

	Cash.	Oct.	Dec.
Saturday	$2.04¼	$2.04½	$2.07
Monday	2.05¾	2.04¼	2.07¾
Tuesday	2.09½	2.04½	2.10¼
Wednesday	2.13	2.09½	2.13¼
Thursday	2.12	2.08¾	2.12½
Friday	2.12	2.08½	2.12¼

Daily receipts and shipments of domestic seed during the week ending September 14, 1928, and in the corresponding week last year, were, in bushels:—

	Receipts 1928.	Receipts 1927.	Shipments 1928.	Shipments 1927.
Saturday	215,730	144,540	7,000	13,420
Monday	472,770	192,720	21,280	29,040
Tuesday	117,810	72,500	83,700	30,300
Wednesday	130,050	94,250	31,000	28,280
Thursday	94,860	65,250	43,200	11,110
Friday	114,750	160,950	42,300	6,060
Total	1,145,960	730,210	229,080	118,210
Previous	978,000	982,840	137,310	212,120
From Sept. 1 to date	2,123,960	1,713,050	366,390	330,330

Flaxseed Receipts at New York

Receipts of flaxseed at New York last week were as follows:—

	Bushels Domestic.	Bushels Foreign.
Monday	.....	135,580
Thursday	.....	46,182
Totals	.....	181,762
Since January 1:—		
This year	48,000	9,406,120
Last year	1,500	15,284,474

Chicago Flaxseed Movement

CHICAGO, Sept. 7, 1928.

Receipts and shipments of flaxseed for the week ended today were as follows:—

	Bushels Receipts.	Bushels Shipments.
Saturday	.....	.....
Monday	1,000	.....
Tuesday	6,000	.....
Wednesday	1,000	.....
Thursday	.....	.....
Friday	.....	.....
Totals	8,000	.....
Since January 1—		
This year	1,786,000	165,000
Last year	1,823,000	2,000

Current prices on linseed oil and cake and meal, formerly printed on page 3, are now printed at the end of this market report.

Winnipeg Flaxseed

WINNIPEG, Sept. 15, 1928.

The market for flaxseed was more active with moderate changes in quotations. The crop movement was light. Reports in regard to the new crop were rather bullish. The market for oil was quiet. The week's closing range was as follows:—

	Cash.	Oct.	Dec.
Saturday	$1.83⅝	$1.84⅛	$1.78
Monday	1.84½	1.84⅝	1.78¼
Tuesday	1.86⅛	1.87	1.81½
Wednesday	1.88	1.88½	1.83⅝
Thursday	1.88½	1.89½	1.84⅜
Friday	1.88	1.88½	1.83½

Canadian Flaxseed Statistics

For the week ended September 7 and for the season from August 1:—

Stocks in Store

	Bushels.
Fort William and Port Arthur	320,195
Interior elevators	71,203
Country elevators	32,774
Vancouver	.....
Total	424,172

Receipts During Week

Fort William and Port Arthur	4,986
Interior elevators	33,262
Country elevators	7,260
Vancouver	.....
Total	45,508

Shipments During Week

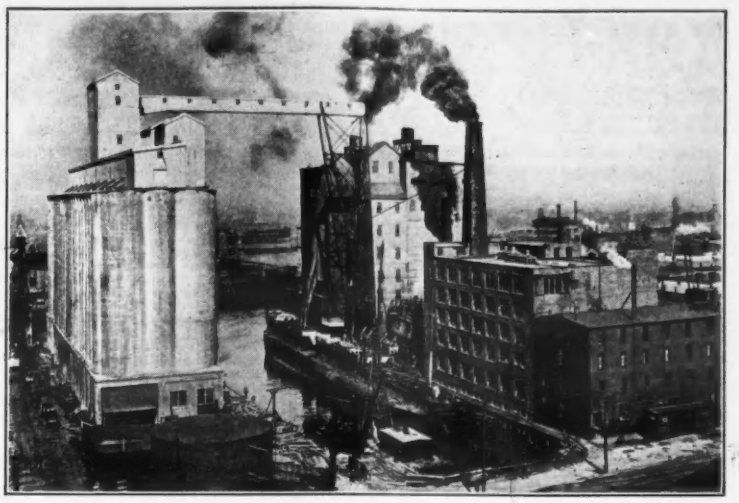
Fort William and Port Arthur	124,908
Interior elevators	19,278
Country elevators, rail	7,677
Vancouver	.....
Total	151,863
Since August 1:—	
Receipts	68,297
Shipments	733,071

Buenos Aires Flaxseed

Flaxseed prices were irregular, changes being moderate. Opening prices per bushel on October contracts were:—

	Last week.	Last year.
Saturday	$1.63½	$1.72⅞
Monday	1.63½	1.72⅝
Tuesday	1.64½	1.70⅞
Wednesday	1.65⅝	1.71⅝
Thursday	1.65⅝	1.72⅞
Friday	1.63⅝	1.72⅞

Valuable information on Imports and Exports of Oils and Oil Materials is given in port lists beginning on page 5.



The Buffalo Mill

THE Buffalo linseed oil mill of Spencer Kellogg and Sons was built in 1894. It is still one of the most important in the country.

To maintain its position in the forefront of the linseed oil industry Spencer Kellogg and Sons operate mills in:

KELLOGG'S THE TEST TELLS 1894

Buffalo, N. Y. **Superior, Wis.**
Minneapolis, Minn. **Edgewater, N. J.**
Manila, Philippine Islands

Branch Offices and Stocks in all large cities

SPENCER KELLOGG & SONS, Inc.
Linseed Oil Department
BUFFALO, N. Y.
New York Office: Graybar Building

Uniform Refined Linseed Oil

Superb
THE IDEAL KETTLE OIL

Recognized for its bleaching qualities and retention of color under long periods of heat:

Remarkably clear and brilliant at all times:

Exceptionally low kettle loss.

These characteristics are prominent in this Oil because of its uniformity.

Acid content not to exceed one-tenth of one per cent

ARCHER DANIELS MIDLAND CO.
Crushers of Uniform Linseed Oil
MINNEAPOLIS, MINN.
***Mills at* Minneapolis, Chicago, Toledo, Buffalo, New York**
A highly organized laboratory is at your disposal to help you develop the particular kind of oil you may need in any special process.

Exports

To—	Bushels Last week.	Previous week.	Last year.
United States	.....	260,000	220,000
United Kingdom	126,000	43,000	20,000
Continent	646,000	878,000	584,000
Orders	1,504,000	720,000	320,000
Others	39,000	.....	.....
Totals	2,315,000	1,901,000	1,144,000

Since January 1

To—	Bushels This year.	Last year.
United States	10,024,000	14,176,000
United Kingdom	2,801,000	4,456,000
Continent	20,176,000	18,780,000
Orders	22,871,000	18,764,000
Totals	55,872,000	56,176,000

Visible Supply

	Bushels.
Last week	3,543,000
Previous week	3,543,000
Last year	4,000,000

Indian Flaxseed Exports

To—	Bushels Last week.	Previous week.	Last year.
United Kingdom	8,000	8,000	16,000
Continent	272,000	136,000	172,000
Totals	280,000	144,000	188,000

Since April 1—	Bushels This year.	Last year.
United Kingdom	512,000	1,248,000
Continent	2,608,000	2,282,000
Totals	3,120,000	3,530,000

London Flaxseed Prices

Quotations on Calcutta flaxseed at London last week were:—

	Per ton £	s.	d.
Saturday	17	10	0
Monday	17	10	0
Tuesday	17	10	0
Wednesday	17	12	6
Thursday	17	12	6
Friday	17	12	6

Hull Flaxseed Prices

Quotations on flaxseed at Hull last week were:—

	Per ton La Plata.	Calcutta.
Saturday	£15¼	.....
Monday	15¼	.....
Tuesday	15¼	.....
Wednesday	15¼	.....
Thursday	15¼	.....
Friday	15¼	.....

Antwerp Flaxseed Prices

Following are the quotations on flaxseed in Antwerp for the week:—

	Per 100 kilos. francs.
Saturday	304
Monday	304
Tuesday	305
Wednesday	306
Thursday	307
Friday	305

Linseed Cake and Meal

The market retained a steady tone. A somewhat better inquiry was noted for meal and reports were also current of an improved call at some outside points. There was a steady inquiry for cake. Offerings continued light in all positions.

Minneapolis Linseed Meal

MINNEAPOLIS, Sept. 14, 1928.

The linseed meal situation is tightening up from day to day and crushers have advanced quotations a dollar in the past two days. Demand has picked up very readily and buyers from all quarters are showing a much steadier interest.

Daily shipments of linseed oil meal and cake during the week ending Setember 14, 1928, and in the corresponding week last year were, in pounds:—

	1928.	1927.
Saturday	895,539	765,400
Monday	1,066,330	777,130
Tuesday	997,470	893,390
Wednesday	1,080,980	955,885
Thursday	1,101,165	576,360
Friday	1,288,395	811,575
Totals	6,429,979	4,779,740
Previous totals	3,490,757	4,585,381
Totals to date	9,920,636	9,365,121

Chicago Linseed Meal

CHICAGO, Sept. 14, 1928.

Inquiries and buying from both large and small sources brought a considerably improved tone into the linseed meal market here the past week, carrying ruling prices 50c. to $1 higher. Round lot buying is beginning to become a larger factor in the dealings. Sellers are feeling more encouraged over the interest shown in the past few days in the market. Fall delivery round lot buying looks to become more extensive. Ruling quotations per ton were:—Car lots, $47.50 to $48; less than car lots, $51; round lots (100 tons or more), September-October, $47 to $47.50; November, $48.

Linseed Oil

The local market for linseed oil was more active and firmer last week, influenced by a bullish report from the government on the flaxseed crop and an advance in seed prices in domestic markets. At the close of the week crushers generally quoted 9.7 to 9.8c. per lb. for car lots in cooperage and some business was reported to have been closed at the advance.

The government report indicated a crop of seed in this country as of September 1 of 23,400,000 bushels, or 1,100,000 less than in the previous month and 3,200,000 bushels less than last year. A report on the Canadian crop was also bullish. Demand for cash seed in domestic markets was active and although receipts continued to increase the cash premium over futures widened.

The Buenos Aires seed market was irregular, closing at a small decline for the week. Good rains were reported in Argentina. There were no shipments from that country to the United States and exports since January 1 show a decrease of about 4,150,000 bushels as compared with the same time last year.

Minneapolis Linseed Oil

MINNEAPOLIS, Sept. 14, 1928.

Linseed oil demand has been good all through the week, with buyers taking supplies regularly and in good volume. Movement is generally in round lots, but this feature is not in extra great volume. Buyers are on the hand-to-mouth basis to a great extent and want supplies coming their way steadily. Shipping instructions are very prompt from day to day and all features of the trade are very satisfactory. Linseed oil is the cheapest vegetable oil being offered in the market at present, and many users of other oils are turning to the crushers for their supplies. Supplies of oil in the hands of the crushers are being depleted rapidly and many of the crushers will soon have to increase their output to cope with shipping instructions. Linseed oil, f.o.b. Minneapolis, September-April shipment, quoted at 9.5c. per pound in car lots, cooperage; 8.6c. per pound in tankcars and 9.9c. per pound in warehouse lots.

Daily shipments of linseed oil during the week ending Setembper 14, 1928, and in the corresponding week last year were, in pounds:—

	1928.	1927.
Saturday	679,221	591,463
Monday	163,257	709,322
Tuesday	685,110	610,234
Wednesday	271,719	743,529
Thursday	447,256	708,716
Friday	655,523	397,396
Totals	2,902,086	3,760,660
Previous totals	3,370,977	3,115,794
Totals to date	6,273,063	6,876,454

Chicago Linseed Oil

CHICAGO, Sept. 14, 1928.

A report considered bullish brought about considerable buying of linseed oil here the last few days at prices 1 to 2 points higher, buyers apparently deeming it wise to cover their requirements in the best manner possible. Crushers bought rather heavily on several days. Warehouse delivery business felt most of the effect of the increased orders, with a somewhat greater advance than in the case of tankcar and coverage business. Ruling quotations per pound were:—Tankcars, September-October, 8.6c.; cooperage, car lots, September-October, 9.4c.; warehouse deliveries, 9.8c.

Antwerp and London Oil

Quotations on linseed oil in Antwerp and London last week were:—

	Antwerp, per 100 kilos. francs.	London, per cwt. s.	d.
Saturday	477	27	7½
Monday	477	27	7½
Tuesday	477	27	9
Wednesday	480	28	0
Thursday	480	28	0
Friday	480	27	9

Current Prices

(For late price changes, see page 2)

Linseed oil, boiled, tanks	lb.	.0930@.0940
car lots, barrels	lb.	.1010@.1020
less car lots, barrels	lb.	.1050@.1060
less than 5 barrels	lb.	.1100@.1110
double, boiled, less than 5 barrels	lb.	.1120@.1130
raw, tanks	lb.	.0890@.0900
car lots, barrels	lb.	.0970@.0980
less than car lots, barrels,	lb.	.1010@.1020
less than 5 barrels	lb.	.1060@.1070
refined, barrels	lb.	.1050@.1110
varnish grades, barrels	lb.	.1070@.1130
Linseed cake, bags	ton.	46.50 @47.00
meal, bags	ton.	55.50 @ —

Radio Applications of Oil Companies Denied

WASHINGTON, Sept. 13, 1928.

The Federal Radio Commission has denied the applications of nine oil companies for permits to use short-length radio waves for point-to-point communications between company-owned land stations.

A hearing on an appeal from this denial has been set for October 2, but it is understood that a postponement will be asked until after the commission has given a hearing on its denial of permits to use radio for geophysical prospecting. This hearing originally was set for September 18, but has been postponed until October 30.

The companies who had applied for point-to-point permits are the Texas Company, the Texas Pipe Line Company, Anderson-Prichard Oil Corporation, Phillips Petroleum Corporation, Burford Oil Company, Skelly Oil Company, Illinois Pipe Line Company, Marland Pipe Line Company and Humble Oil & Refining Company.

Those applying for permits to use radio in geophysical prospecting are the Geophysical Research Corporation, the Texas Company, Phillips Petroleum Company, Marland Pipe Line Company and the Humble Oil & Refining Company.

The British Oil & Cake Mills, Ltd., has decided to manufacture linseed oil in Australia.

The Rolls Chemical Company, Buffalo, agent for the American Linseed Company, before the latter's recent sale, has concluded arrangements to handle in its territory the linseed oils of the Mann Brothers Company, Buffalo. Mill stocks will be available at Rochester, Syracuse and Utica, N. Y.

The Bisbee Linseed Company, Chicago Heights, Ill., has filed a complaint with the Interstate Commerce Commission seeking lower freight rates on shipments of linseed oil from Chicago Heights to Galveston, Houston, and San Antonio, Texas.

Exports from Port Arthur

(Continued from page 13)

WAX, PARAFFIN—1,520 bgs, Eclipse, Shanghai
1,316 bgs, Afel, Montevideo

Clearance Dates

Afel, September 5
British Endeavor, September 1
Eclipse, August 31
Papoose, September 1

Exports from San Francisco

ACID, BORIC—200 bgs, Shinyo, Japan
ASPHALT—257 tons, Shinyo, Japan
43 tons, Wairuna, New Zeaand
25 tons, Ventura, South Sea Islands
BORAX—260 bgs, Shinyo, China
CHEMICALS—90,198 lbs, Wairuna, New Zealand
4,650 lbs, Wairuna, South Sea Islands
4,804 lbs, Providencia, Mexico
124,150 lbs, Ventura, Australia
4,900 lbs, Canadian Coaster, British Columbia
FERTILIZER — 21 tons, Canadian Coaster, British Columbia
GASOLINE—19,114 bbls, Plume, Australia
913 bbls, Wairuna, South Sea Islands
1,727 bbls, Wairuna, New Zealand
75,000 bbls, Clydefield, England.
60 bbls, Providencia, Mexico
GREASE—6,930 lbs, Shinyo, Japan
30,400 lbs, Ventura, Australia
4,540 lbs, Canadian Coaster, British Columbia
3,321 lbs, Wairuna, New Zealand
INK—30 dms, Wairuna, New Zealand
15 dms, Ventura, Australia
KEROSENE—28,282 bbls, Plume, Australia
615 bbls, Wairuna, South Sea Islands
278 bbls, Wairuna, New Zealand
38 bbls, Providencia, Mexico
LARD—36,000 lbs, Providencia, Mexico
LIME—20 bgs, Ventura, South Sea Islands
LITHOPONE—126 bbls, Ventura, Australia
MINERAL SPIRITS—41,580 bbls, Plume, Australia
2,880 gls, Wairuna, New Zealand
OIL, COCONUT — 16,537 lbs, Wairuna, New Zealand
FUEL—51,737 bbls, Kanju, Japan
60,000 bbls, Koyo, Japan
LUBRICATING—136 bbls, Shinyo, Japan
584 bbls, Wairuna, South Sea Islands
4,636 bbls, Wairuna, New Zealand
60 bbls, Providencia, Mexico
1,077 bbls, Ventura, Australia
412 gls, Ventura, South Sea Islands
1 bbl, Eemdijk, England
56 bbls, Canadian Coaster, British Columbia
OILCAKE, COPRA—2,107 bgs, Eemdijk, Germany
PAINT—379 gls, Shinyo, Japan
448 gls, Wairuna, South Sea Islands
757 gls, Wairuna, New Zealand
113 gls, Providencia, Mexico
1,618 gls, Ventura, Australia
125 gls, Ventura, South Sea Islands
PASTE—12,325 lbs, Shinyo, Japan
POLISH—20 cs, Ventura, South Sea Islands
ROSIN—235 bbls, Ventura, Australia
SALT—65,394 lbs, Wairuna, South Sea Islands
2,400 lbs, Wairuna, New Zealand
78,400 lbs, Ventura, Australia
900 lbs, Ventura, South Sea Islands
200,000 lbs, Canadian Coaster, British Columbia
SOAP—150 cs, Providencia, Mexico
SULPHUR—170 bbls, Ventura, Australia
WAX, PARAFFIN — 800 bgs, Wairuna, New Zealand

Clearance Dates

Canadian Coaster, August 11
Clydefield, August 13
Eemdijk, August 11
Kanju, August 13
Koyo, August 13
Plume, August 11
Providencia, August 13
Shinyo, August 14
Ventura, August 13
Wairuna, August 13

Exports from Savannah

CLAY—27 tons, Yokohama, London
OCHER—158 bbls, Yokohama, London
ROSIN, GUM—633 bbls, Yokohama, London
434 bbls, Yokohama, Rotterdam
1,000 bbls, Yokohama, Hamburg
150 bbls, Yokohama, Hull
23 bbls, Yokohama, India
TURPENTINE, GUM—150,050 gls, Yokohama, London
5,000 gls, Yokohama, Rotterdam

Exports from Seattle

GLUE—40 cs, President Grant, Kobe
PAINT—134 cs, President Grant, Shanghai

Containers Returned

New York

BARRELS—136, West India Oil Co, Fort Victoria, Hamilton
78, West India Oil Co, Mayaro, Demerara
22, Colgate & Co, Southern Cross, Rio de Janeiro
CYLINDERS—48, Seven Seas Mercantile Transport Co, Inc, Amor, Maracaibo
2, Asiatic Petroleum Co, Amor, Maracaibo
4, C B Kaufman, Greystroke Castle, Singapore
97, The Barrett Co, Primero, Buenos Aires
22, Swift & Co, Primero, Buenos Aires
20, Anglo-Mexican Petroleum Co, Panuco, Tampico
7, Thomas Scott & Co, Mayaro, Trinidad
7, Furness, Withy & Co, Mayaro, Trinidad
37, Seven Seas Mercantile Co, Mayaro, Trinidad
16, Fidanque Bros & Son, Cristobal, Panama
12, Pennsylvania Mfg Co, Cristobal, Cristobal
3, Baldwin Locomotive Works, Cristobal, Port au Prince
70, Meyer, Lyra & Co, Martinique, Puerto Colombia
9, American Gold & Platinum Co, Mayari, Cristobal
4, Fidanque Bros & Son, Ulua, Cristobal
9, Armour & Co, Southern Cross, Buenos Aires
63, Liquid Carbonic Co, Coamo, Santo Domingo
12, Air Reduction Co, Coamo, San Juan
2, Prest-O-Lite Co, Coamo, San Juan
24, Linde Air Reduction Co, Coamo, San Juan
10, Liquid Carbonic Co, Coamo, San Juan
3, National Ammonia Co, Coamo, San Juan
15, J H Senier, Zacapa, Cartagena
23, The Barrett Co, Zacapa, Kingston
7, Suzarte & Whitney, Tachira, Maracaibo
20, Armour & Co, Western Knight, Capetown
16, Armour & Co, Western Knight, East London
20, Armour & Co, Phidias, Buenos Aires
20, General Carbonic Co, San Juan, Ponce
DRUMS—7, West India Oil Co, Cristobal, Cristobal
DRUMS—70, West India Oil Co, Martinique, Cape Haitien
15 [illegible]ter Oil Co, Canadian Highlander, Lyttelton
29, General Motors Co, Frederick VIII, Oslo
2, National Ammonia Co, Ulua, Cristobal
10, W L Long, Carrillo, Puerto Castilla
7, Young & Hyde, Coamo, San Juan
70, Tidewater Oil Co, Cabo Espartel, Genoa
709, West India Oil Co, Munamar, Nassau
TANKS—7, United Fruit Co, Carrillo, Puerto Barrios
18, Prest-O-Lite Co, Coamo, San Juan
TUBES — 13, Transmarine Mercantile Corpn, Astrea, Cape Haitien
7, F L Aste Co, Astrea, Cape Haitien

Boston

DRUMS—2, Tirrell Gas Machine Co, Prince George, Yarmouth

Philadelphia

BARRELS, STEEL—226, Hercules Powder Co, Belnor, Bremen

New Orleans

BARRELS—115, West Indies Oil Co, Gansfjord, Belize
87, Texas Oil Co, Virginia, Cristobal
DRUMS—250, Point Gorda, Port au Prince
10, Standard Oil Co, Gatun, Celba
79, Standard Oil Co, Abangarez, Puerto Barrios
15, Crescent City Carbonate Co, Abangarez, Puerto Barrios
11, Armour & Co, Leerdam, Bilbao
73, R H Goddot, Gansfjord, Livingston
19, Pan-American Exporters, Gansfjord, Livingston
40, Chalmette Petroleum Co, Gansfjord, Belize
5, United Fruit Co, Gansfjord, Belize
15, Cuyamel Fruit Co, Copan, Puerto Cortez
28, Cuyamel Fruit Co, Rama, Bluefields
95, Standard Fruit & Steamship Co, Rama, Bluefields
50, United Fruit Co, Atenas, Tela

Recent Charters

FERTILIZER—400 tons, Sch Gertrude Parsons, Boston to Windsor
200 tons, Sch, Vilda A, Boston to Windsor or Wolfville
300 tons, Sch Ronald C Longmire, Boston to Wolfville
200 tons, Sch Margery Austin, Boston to Windsor or Wolfville
MOLASSES— —— tons, S S Athelcrest, Cienfuegos to deep water, private terms
OIL CAKE—2,081 tons, S S Jan Van Nassau, two ports Gulf to four ports Denmark, $6.50, September 17-28
PETROLEUM, CRUDE—200,000 cs, S S Simon Von Utrecht, New York or Philadelphia to Far East, basis 26c one, with ½c additional for each extra port, early October loading
8,200 tons, Motorship Varg, refined and/or spirit, 11s 6d, Constanza to French Atlantic, October
6,340 tons, Motorship Shedrecht, refinad and/or spirit, 16s 6d, Gulf to Rouen, October
9,000 tons, Motorship Kattegat, refined and/or spirit, 11s 3d, Black Sea to U K-Continent, option further trips 11s 9d, September-October
5,430 tons, Motorship Zoroaster, gas oil, 17s, New York to Stockholm and/or Oxelosund, September
10,254 tons, S S Cecil County, fuel or crude oil, about 19c, Tampico to Boston, first half September
10,254 tons, S S Cecil County, fuel or crude oil, 11s or 12s, north of Hatteras to U K-Continent, late September or early October (unconfirmed)
5,000 bbls, S S ——, gasoline, Trinidad to New York, prompt
—— tons, S S G W Barn, clean, San Pedro to New York, 68c, October
7,500 tons, S S Olijaren, Black Sea, Ertvelde and/or Hamburg, clean, 11s 6d, October 10-12
9,000 tons, S S Gymeric, dirty, twelve months' time charter, 5s, October
PLASTER— —— tons, S S Belnor, North of Hampton Roads to Canada, thence to Philadelphia, private terms
SULPHUR—6,500 tons, S S Weir boat, Gulf to Melbourne, 27s 3d, December loading.

Foreign Trade Openings

Correspondence in regard to any of the following foreign trade apportunities should be addressed to the Bureau of Foreign and Domestic Commerce, Washington, or to any district or cooperative office of the Bureau and not to this paper. When writing give the number of the item:—

Benzol:—Purchase and agency; Hamburg, Germany (33,356).

Chemicals, industrial:—Agency; Oslo, Norway (33,291).

Chemical products:—Agency; Zurich, Switzerland (33,335).

Chemical raw materials:—Purchase and agency; Cologne, Germany (33,344).

Chemical residues and slags:—Agency; Hamburg, Germany (33,320).

Cottonseed oil, peanut and coconut cake:—Agency; Copenhagen, Denmark (33,297).

Oils, essential:—Purchase and agency; Hamburg, Germany (33,343).

Oils, essential:—Purchase; Hamburg, Germany (33,355).

Oils, mineral:—Purchase and agency; Hamburg, Germany (33,356).

Paraffin:—Purchase and agency; Hamburg, Germany (33,356).

Paraffin:—Agency; Caracas, Venezuela (33,293).

Rosin:—Agency; Caracas, Venezuela (33,293).

Rosin, gum and wood.—Purchase and agency; Hamburg, Germany (33,356).

Soaps:—Agency; San Pedro de Macoris, Dominican Republican (33,332).

Oscar L. Biebinger, presidet of the Mallinckrodt Chemical Works, St. Louis, was at the New York office of the company last week.

J. A. McGean, president of the Harshaw, Fuller & Goodwin Company, Cleveland, was at the New York office several days during the week of September 9.

Dr. C. H. Searle, president of G. D. Searle & Company, pharmaceuticals, Chicago, has returned to his desk after a three months' vacation spent at his summer home in the northern Wisconsin woods.

August Refined Oil Consumption 297,152 Barrels —Prices Lower—Cotton Down—Crude Easier in Southern Markets

A decline occurred in refined oil futures in the local market last week and Southern markets for crude oil were also easier. Trading here was quiet and there was apparently comparatively little doing in the South. Offerings of cake and meal continued light. Weather conditions were more favorable for the cotton crop. The monthly cottonseed report from the Census Bureau was bullish, but it had only a temporary effect here.

The total transactions in refined oil futures on the New York Produce Exchange for five business days of the week were 81,800 barrels. Final quotations on Friday showed a decline of $2 to $2.50 per barrel as compared with the closing prices of the previous Saturday.

Cotton futures were more active with the trend of prices downward. On Friday October closed at 17.55c., December 17.50c., January 17.44c. and March 17.44c., showing a loss of $7.50 to $8 per bale, compared with the previous Friday.

Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Cottonseed, Cake, Meal

Quiet conditions continued to prevail much of the time in Southern markets last week, buyers and sellers in some instances being disposed to hold off for the monthly cottonseed report from the Census Bureau. Also offerings of seed and products continued light for nearby shipment. The crop is still reported as from one to two weeks late in parts of the belt. In some quarters there was a tendency to shade prices, though quotations were still largely nominal.

According to official returns, receipts of seed at the mills during the first month of the current season were more than 100,000 tons smaller than in the same month last year. Production of cake and meal in August was 34,760 tons against 72,264 tons last year.

Cottonseed Oil

The trend of refined cottonseed oil futures in the local market was downward much of the time last week. Local and other traders were disposed to sell owing to the increase in the recent government estimate of the crop and also because cotton prices broke sharply and crude oil was easier in the South. These factors more than offset, for the time being at least, a further advance in some products which compete with cottonseed oil and a bullish monthly cottonseed report from the Census Bureau.

The indicated cotton report as of September 1, according to official returns, was 14,439,000 bales, or an increase within a month of about 150,000 bales. Many in the trade here had expected a reduction in the official figures. Weather conditions in many parts of the South last week were more favorable and fewer complaints were heard regarding the weevil situation.

According to the official monthly statistics consumption of refined oil during August was 297,152 barrels against 266,067 in the previous month and 347,276 in August last year. The visible supply in the shape of seed and oil at the close of August was equal to 706,911 barrels of refined oil against 899,209 in the previous month and 895,373 barrels a year ago.

Receipts of seed at the mills during the first month of the new season were 169,498 tons against 275,505 tons in the same month last year; crushed 73,795 tons against 159,556 tons. Production of crude oil during August was 20,863,435 pounds against 46,157,477 pounds last year; refined 19,677,491 pounds against 33,253,044 pounds. Stocks of seed at the mills at the close of August were 117,484 tons against 205,433 tons a year ago; crude oil 15,345,913 pounds against 25,735,836; refined 236,955,432 pounds against 272,955,432.

The weekly government weather and crop report was regarded as rather bullish in the main, though it was in some respects favorable. It stated that the weather was again too wet in the Atlantic Coast States and deterioration was reported from many places with complaints of bolls rotting in the Southern portions, especially in Georgia, though the weather at the end of the week was more favorable. In central portions of the belt progress was mostly fair to very good, though there were still complaints of shedding and general deterioration in localities. Aside from shedding cotton made fair progress in Oklahoma. The crop opened prematurely in dry areas in the Southwest. Picking is becoming general.

On the decline shorts covered and there was also further buying atrributed to refiners. Commission houses in some cases bought for a turn on the long side, encouraged by the strength of lard and a further rise in tallow. The movement of live hogs to Western markets was rather light, and at Chicago hog prices advanced. The weight of the hogs received in the latter market during the week ended September 8 was 256 pounds against 260 pounds in the previous week.

Part of the loss in oil was recovered before the close, but final quotations on Friday showed a net decline of 52 to 61 points as compared with the closing prices of the previous Saturday.

Following is a record of the market for the week:—

Monday, September 10, 1928

	Cents per lb. in bbls. High.	Low.	Close.	Sales Bbls.
September	10.20	10.20	10.00@10.40	100
October	10.14	9.99	10.07@10.10	3,800
November	9.95	9.86	9.86@ —	400
December	10.00	9.83	9.88@ 9.92	3,600
January	10.05	9.93	9.93@ —	3,700
February	....	....	9.90@10.08	....
March	10.17	10.08	10.08@10.00	2,400
April	....	....	10.00@10.15	....
Total sales				15,000

Spot (prime summer yellow)—10.00.
Crude (immediate Southeast)—8.00.
Valley—8.25.
Texas—Nominal.

Tuesday, September 11, 1928

	Cents per lb. in bbls. High.	Low.	Close.	Sales Bbls.
September	....	....	9.85@ 9.97	....
October	10.02	9.98	9.88@ —	3,600
November	9.70	9.70	9.70@ 9.75	600
December	9.85	9.67	9.70@ —	2,700
January	9.85	9.74	9.74@ 9.77	4,300
February	....	....	9.80@ 9.90	....
March	10.05	9.88	9.90@ 9.92	7,100
April	....	....	9.95@10.05	....
Total sales				*18,700

Spot (prime summer yellow)—9.75@10.10.
Crude—Nominal; no trading.

* Includes 400 switches.

Wednesday, September 12, 1928

	Cents per lb. in bbls. High.	Low.	Close.	Sales Bbls.
September	9.85	9.82	9.82@ —	500
October	9.98	9.82	9.83@ —	3,700
November	....	....	9.62@ 9.70	....
December	9.82	9.57	9.59@ 9.57	4,500
January	9.85	9.61	9.62@ —	4,900
February	....	....	9.62@ 9.63	....
March	9.99	9.78	9.78@ —	3,300
April	....	....	9.81@ 9.85	....
Total sales				*17,100

Spot (prime summer yellow)—9.85@10.00.
Crude (mmediate Southeast)—8.00.

* Includes 200 switches.

Thursday, September 13, 1928

	Cents per lb. in bbls. High.	Low.	Close.	Sales Bbls.
September	9.80	9.80	9.73@ 9.85	1,600
October	9.80	9.75	9.78@ 9.86	3,900
November	9.57	9.57	9.57@ 9.65	100
December	9.57	9.53	9.58@ 9.60	800
January	9.68	9.60	9.64@ 9.65	5,400
February	....	....	9.65@ 9.80	....
March	9.84	9.76	9.80@ —	3,000
April	....	....	9.84@ 9.90	....
Total sales				*22,800

Spot (prime summer yellow)—9.75.
Crude (immediate Southeast)—7.87½.

* Includes 8,000 switches.

Friday, September 14, 1928

	Cents per lb. in bbls. High.	Low.	Close.	Sales Bbls.
September	....	....	9.75@10.00	....
October	9.92	9.82	9.85@ 9.90	2,300
November	....	....	9.65@ 9.75	....
December	9.72	9.62	9.67@ —	2,200
January	9.77	9.72	9.73@ 9.75	1,700
February	....	....	9.73@ 9.85	....
March	9.92	9.85	9.89@ —	1,700
April	9.93	9.93	9.90@ 9.98	100
Total sales				*8,200

Spot (prime summer yellow)—9.75@10.50.
Crude (immediate Southeast)—8.00.
Valley—8.00.
Texas—7.75.

* Includes 200 switches.

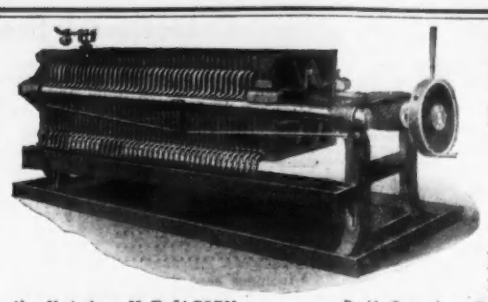
Saturday cottonseed prices will be found on page 2.

Chicago Cottonseed Oil

CHICAGO, Sept. 14, 1928.

The market for refined cottonseed oil looked up in Chicago, with a better demand, although crude was easy. Buying had a fairly good tone. Texas prime crude last sold at 8c. Valley and Southeastern material also ruled last at 8c. Prime yellow bleachable oil was quoted at 9⅞c., up slightly. GKood off-summer yellow fig oil was quoted at 9⅝c., up ¼c.; refined edible oil was ruling noticeably firmer. Ruling prices

Valuable information on Imports and Exports of Oils and Oil Materials is given in port lists beginning on page 5.



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were:—Barrels, car lots, 11¼c. to 11⅝c.; barrels, less than car lots, 11⅝c. to 11⅝c.

Hull Cottonseed Oil Prices

Quotations on cottonseed oil in barrels in Hull, England, last week were:—

	Refined, per cwt. s.	d.	Egyptian crude, per cwt. s.	d.
Saturday	33	9	30	9
Monday	33	9	30	0
Tuesday	33	9	30	0
Wednesday	33	9	29	9
Thursday	33	9	30	0
Friday	33	9	29	9

Atlanta Cottonseed Products

ATLANTA, Sept. 12, 1928.

Scarcity of offerings of cottonseed meal make business in this item of little interest, but attention centers in the future market. Even with respect to futures there is very little actual buying, the disposition being to await developments in the cotton crop. While offers have been made in the Georgia territory at $33 per ton for 7 percent meal, October delivery, no trading is reported. In South Carolina some trading is reported at $34 per ton, October, for 7 percent meal.

Fertilizer manufacturers have turned with such interest to meal as a source of organic ammoniates, that it is reported to have weakened other organic ammoniates.

The government cotton crop report issude September 8 as of September 1 caused weakness in the market because of a larger estimate than was expected. Cotton depreciation during the past week was marked in the Southeast, due to rotting bolls, sprouting seed in open cotton, shedding and weevils, due to excessive rain.

The quotations of this market are as follows:—

OIL.—Prime crude, 7.65c. per pound.

MEAL.—7 percent meal, $46 to $47 per ton, mill points.

HULLS.—Loose, $12.50 to $13 per ton.

LINTERS.—First grade, 7c. to 9c. per pound; second grade, 5¼c. to 5½c. per pound; third grade, 4¼c. to 4½c. per pound.

New Orleans Cottonseed

NEW ORLEANS, Sept. 12, 1928.

The market for cottonseed products was steadier. There was a fair trade in oil but other products were quiet with offerings generally light. Aside from weevil activity, crop accounts were more favorable. Prime crude oil, 8c. per pound, f.o.b. New Orleans; prime summer yellow, 9½c. per pound; soap stock, 50 percent, A.A.F., loose, 2c. per pound; cake, 8 percent ammonia, $38, nominal, per ton; meal, 8 percent ammonia, $47.50, nominal, per ton; hulls, $12 per ton.

French Ratio of Alcohol To Oil Imports Continued

A French decree of August 10 maintains at 10 percent of the petroleum imported, the amount of alcohol that must be purchased by oil importers from the government. This decree will cover the year beginning October 1.

The basic price is 180 francs per hectoliter for alcohol above 99.4 deg., and 170 francs for alcohol at 94 deg. The basic figure corresponds to 100 deg. (Gay-Lussac) at 15 deg. C. delivered at railway station at the buyer's place.

Mexico Is to Encourage Growth of Menthol Plant

Mexico is endeavoring to encourage the commercial exploitation of the hedeoma piperita plant from which menthol may be produced. The plant now grows wild in various districts of Mexico and the federal Department of Industry, Commerce and Labor is conducting experiments as to the feasibility of its cultivation on a large scale.

Mellon Institute Plans Chemistry Lecture Course

Two series of lectures on subjects in industrial chemistry and chemical engineering will be presented by technologic specialists of Mellon Institute of Industrial Research during the university year 1928-29. These discourses, which will be delivered on Mondays, in the fourth period (11.30 a. m. to 12.30 p. m.), throughout both semesters, in the fellows' room of the institute, will be open to all students of industrial chemistry and chemical engineering in the University of Pittsburgh, as well as to all institute members. They will also be open, on special permission, to other qualified students of the university and to chemists and teachers of chemistry of the Pittsburgh district.

The program follows:—

October 1—Introductory lecture by Edward R. Weidlein, "Chemical Engineering, the Directional Force of Chemical Industry."

First Series

This series will consist of lectures on some important chemical engineering materials, their manufacture, properties, uses, and evaluation.

October 8—S. M. Phelps, "The Manufacture of Refractories."

October 15—S. M. Phelps, "The Properties of Refractories."

October 22—S. M. Phelps, "The Uses of Refractories."

October 29—C. H. Geister, "The Manufacture of Lime."

November 5—C. H. Geister, "The Properties and Uses of Lime."

November 19—Tracy Bartholomew, "The Manufacture of Portland Cement."

November 26—Tracy Bartholomew, "The Properties and Uses of Portland Cement."

December 3—Henri Marc, "Asbestos and Magnesia Products."

December 10—R. H. Heilman, "Heat Insulation Materials."

December 19—B. A. Rice, "Vitreous Enamels."

January 7—E. E. Marbaker, "Cast Iron."

January 14—H. K. Work, "Aluminum and Its Useful Alloys."

January 21—B. B. Wescott, "Special Corrosion-Resistant Alloys."

Second Series

The second series will consist of lectures on professional opportunities in various industries—inspirational talks on what the chemist and chemical engineer have done, are doing, and can probably accomplish in these fields.

February 11.—R. E. Arnold, "Clay Products."
February 18—E. J. Casselman, "Glass."
February 25—W. A. Gruse, "Petroleum Refining."
March 4—O. O. Malleis, "By-Product Coke."
March 11—E. W. Reid, "Olefin Products."
March 18—W. B. Burnett, "Naval Stores."
March 25—P. B. Davidson, "Paper."
April 8—H. L. Cox, "Explosives."
April 15—R. B. Trusler, "Fatty Oils and Soaps."
April 22—G. S. Hiers, "Dyes."
April 29—G. H. Johnson, "Textiles."
May 6—H. K. Salzberg, "Paints."
May 13—G. D. Beal, "Fine Chemicals."

Cottonseed Statistics to August 31

WASHINGTON, Sept. 12, 1928.

Cottonseed received, crushed, and on hand, and cottonseed products manufactured, shipped out, on hand and exported for one month ended August 31, 1928 and 1927, were as follows, according to the Department of Commerce:—

Cottonseed Received, Crushed, and on Hand (Tons)

	Received at mills,* Aug. 1 to Aug. 31 1928.	1927.	Crushed, Aug. 1 to Aug. 31 1928.	1927.	On hand at mills, Aug. 31 1928.	1927.
United States	169,498	275,505	73,795	159,856	117,484	205,433
Georgia	2,820	33,963	771	21,614	2,523	14,731
Louisiana	2,960	11,760	1,052	6,027	2,025	16,361
Mississippi	912	17,959	3,881	18,593	1,031	12,037
Texas	160,649	185,575	65,238	96,579	108,453	122,927
All other	2,157	26,248	2,853	17,043	3,452	39,377

* Includes seed destroyed at mills but not 21,781 tons and 89,784 tons on hand August 1, nor 440 tons and 3,971 tons reshipped for 1928 and 1927, respectively.

Cottonseed Products Manufactured, Shipped Out, and On Hand

	On hand Aug. 1.	Produced Aug. 1 to Aug. 31.	Shipped out Aug. 1 to Aug. 31.	On hand Aug. 31.
Crude oil, pounds, 1928-9	*19,456,834	20,863,435	22,395,687	*15,345,913
Crude oil, pounds, 127-8	16,296,641	46,157,477	38,152,971	25,735,536
Refined oil, pounds, 1928-9	†335,405,666	‡19,677,491	.....	†236,220,426
Refined oil, pounds, 1927-8	378,612,700	33,253,044	.....	272,955,432
Cake and meal, tons, 1928-9	32,601	34,760	47,567	19,794
Cake and meal, tons, 1927-8	63,632	72,264	91,574	44,142
Hulls, tons, 1928-9	30,571	20,497	24,467	26,601
Hulls, tons, 1927-8	168,045	45,334	68,295	145,084
Linters, running bales, 1928-9	42,697	13,948	16,542	40,103
Linters, running bales, 1927-8	46,177	24,789	42,308	28,658
Hull fiber, 500-lb. bales, 1928-9	2,118	.....	138	1,980
Hull fiber, 500-lb. bales, 1927-8	21,930	.....	736	21,194
Grabbots, motes, etc., 500-lb. bales, 1928-9	1,748	641	1,277	1,112
Grabbots, motes, etc., 500-lb. bales, 1927-8	1,842	782	909	1,715

* Includes 2,295,178 and 1,186,561 pounds held by refining and manufacturing establishments and 3,290,652 and 1,820,600 pounds in transit to refiners and consumers August 1, 1928, and August 31, 1928, respectively.

† Includes 7,524,641 and 4,941,057 pounds held by refiners, brokers, agents and warehousemen at places other than refineries and manufacturing establishments and 9,895,141 and 14,162,703 pounds in transit to manufacturers of lard substitute oleomargarine, soap, etc., August 1, 1928, and August 31, 1928, respectively.

‡ Produced from 21,807,548 pounds of crude oil.

Exports of Cottonseed Products for Twelve Months Ended July 31.

	1928.	1927.
Oil, crude, pounds	48,412,778	40,550,191
refined, pounds	10,267,237	19,914,658
Cake and meal, tons	308,770	501,073
Linters, running bales	193,232	257,324

Metal Cap Firms Merge

The merger of eight metal cap and seal manufacturing companies and the formation of a new company to be known as the Anchor Cap Corporation to control the smaller concerns has been virtually completed. The companies concerned are the Anchor Cap and Closure Corporation, the Anchor Cap & Closure Corporation of Canada, Ltd., the Capstan Glass Company, the Paragon Can & Cap Company, the Sure Seal Company, Inc., the Beacon Machinery Corporation, the Automatic Screw Capping Machine Corporation and the Pilgrim Auto Supply Corporation.

Novadel Wins Patent Suit Against Purifine

The Novadel Process Corporation, this city, September 13 was given a favorable decision in its suit against the American Purifine Company for infringement of the former's patents for cereal bleaching processes. The court sustained the plaintiff in its contention that its patents covered the use of all organic peroxides and specifically benzoyl peroxide.

Alcohol Institute Votes Larger Advertising Fund

At a special meeting of directors of the Industrial Alcohol Institute, September 6 and 7, in Chicago, the co-operative advertising fund of the institute was voted increased from $400,000 to $600,000. Various routine matters were disposed of at the sessions over which Russel R. Brown, president of the U. S. Industrial Alcohol Company and president of the institute, presided.

Speakers at the meeting estimated that more than 30,000,000 gallons of completely denatured alcohol will be required this winter for automobile radiators and for antifreeze preparations.

Steadily diminishing production of molasses from which alcohol is made, coupled with a correspondingly increased demand by other nations formerly using but little molasses was a subject of much discussion at this conference.

Among those present were R. R. Brown, president, and Paul Harrison, general sales manager, U. S. Industrial Alcohol Company; W. S. Kies, chairman executive committee, and R. H. Grimm, president, American Commercial Alcohol Company; H. I. Peffer, president, American Solvents & Chemical Company; S. S. Neuman, vice-president, Publicker Commercial Alcohol Company; Sid Klein, vice-president, Kentucky Alcohol Corporation; Eugene O'Shaugnessy, Rossville Company; Walter Trautman, president, General Industrial Alcohol Company; A. K. Hamilton and William H. Hoodless, Pennsylvania Sugar Company; J. M. Wafer, Industrial Chemical Manufacturing Company; Walter P. Spreckels, Syrup Products Company; George F. Dieterle, Federal Products Company; A. W. Hugueley, Seaboard Chemical Company; Walter Buck, Industrial Solvents Corporation; C. A. Wagner, National Industrial Alcohol Company; James P. McGovern, general counsel, and Dr. Lewis H. Marks, executive secretary, Industrial Alcohol Institute, New York.

N.P.O.&V.A. Clubs Are Getting Many New Members

The National Paint, Oil and Varnish Association membership committee has its fall campaign under way and the chairmen of sixteen local committees have equalled or beaten the quotas of new members set for them. The names of the sixteen and their local clubs follow:—Hager, New York; Healy, Philadelphia; Zimmerman, Pittsburgh; Schaefer, Toledo; Swartz, Baltimore; Howe, Indianapolis; Meyer, Denver; Saunders, Memphis; Collinson, Detroit; Knoke, St. Louis; Woosley, Louisville; White, Minneapolis, St. Paul; White, Nebraska; Weatherford, Richmond; Cannon, Los Angeles; Jordan, San Francisco.

Several more applications in hand for presentation at September meetings.

The Brooklyn College of Pharmacy, established in 1887, within the year is to become a part of Long Island University.

Henkel & Co., prominent glycerin producer, Dusseldorf, Germany, has increased its capital from 10,000,000 to 24,000,000 marks.

The first fall meeting of the Chicago Perfumery, Soap and Extract Association will be held September 19 at the Hamilton Club, Chicago.

A dinner in honor of his fifty years of service with the Faxon & Gallagher Drug Company, was given Edward C. Hamill last week by fellow employees.

H. D. Mackinnon, formerly president and general manager of the Braun Corporation, has been appointed general sales manager for the American Agar Company, San Diego, Calif.

The Bovinine Company has been allowed drawback from November 22, 1927, on medicinal preparations manufactured with the use of domestic tax paid alcohol at its plant in Chicago.

Appeal from a ruling of the United States Customs Court, holding copper thiocyanate to be free of duty, has been approved by the Secretary of the Treasury. The government contends that the article should be classified as a medicinal preparation dutiable at 25 per cent.

The Jones-Dabney Company, Louisville, will place in operation September 17 a new lacquer plant in Detroit, to handle the company's automotive business in the Detroit territory. Sophus Bohme, who has been assistant superintendent of the company's Louisville plant, will be in charge of production at the Detroit factory.

Treasury decision 42316-O of July 15, 1927, providing for the allowance of drawback on toilet and medicinal preparations manufactured by the Arden Chemical Company, New York, with the use of domestic tax-paid alcohol, has been extended to provide for the same manufacturers by Elizabeth Arden, Inc., successor of the Arden Chemical Company, effective March 12, 1928.

Prompt and Careful Attention Given to Less Than Carload Orders

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NATIONAL OIL PRODUCTS COMPANY

HARRISON, N. J.

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BOSTON, MASS.

Miscellaneous Oils

Tallow More Active and Prices Again Advance —Chinawood Oil Firmer—Olive Foots Higher—Crude Menhaden Easier

Business in miscellaneous oils, fats and greases was quieter last week, a decline in cottonseed oil making consumers of other products disposed in some cases to curtail purchases pending further developments in the situation. Offerings were generally light, however, and the trend of prices was again upward.

Chinawood oil was firmer, slightly higher prices being demanded on the coast with reports current of occasional sales at the advance. Offerings were light with the China market reported as firm and above a parity with prices ruling in the markets here and on the Pacific Coast.

Coconut oil was steady in domestic markets with offerings from importers and refiners light. There were no new developments of importance reported in the Far Eastern situation. Arrivals of copra at Manila recently are reported to have been liberal.

Olive oil foots continued firm, the trend of prices here still being upward. Offerings from abroad were light with the market firm. Higher prices were demanded in some quarters for edible olive oil while denatured was firm at the recent advance.

The rise in tallow was reflected in an increased inquiry for palm oil and the market was firmer. There was little Lagos or Niger available on spot and offerings for shipment were small. Refined rapeseed was easy. Shipments of seed from India to the United Kingdom and the Continent from January 1 to August 29 were about 13,000 tons larger than in the same time last year.

Tallow was stronger with the offerings from producers light. There was a better inquiry. The weekly auction in London was postponed. The trend of cash lard was upward at times with a fairly active inquiry from domestic buyers. Export trade was quiet. The movement of live hogs in the West was moderate. Grease was slightly firmer with offerings light.

A further advance occurred in oleo stearin. Demand for stearic acid was good and the market displayed firmness, some producers being sold ahead. Changes in animal oils were moderate, the tendency of prices in some instances being upward. Fish oils were generally steady or firm. Weather conditions were more favorable for menhaden fishing.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced
Chinawood oil, tanks, Pacific Coast, spot, ¾c. per lb.	Corn oil, crude, tanks, mills, ⅛c. per lb.
September shipment from coast, ¼c. per lb.	Menhaden oil, crude, 1c. per gal.
October shipment from coast, ¼c. per lb.	Rapeseed oil, refined, spot, 1c. per gal.
Grease, house, ¼c. per lb.	
white, ¼c. per lb.	
Lard, city, 25c. per 100 lbs.	
Western, 15c. per 100 lbs.	
Lard oil, extra, 25c. per 100 lbs.	
extra No. 1, 25c. per 100 lbs.	
Winter strained, 25c. per 100 lbs.	
Neatsfoot oil, extra 25c. per 100 lbs.	
No. 1, 25c. per 100 lbs.	
Olive oil, edible, 5c. per gal.	
Olive oil foots, spot, ¼c. per lb.	
Tallow, edible, ¼c. per lb.	
extra, ¼c. per lb.	
special, ¼c. per lb.	
Tallow oil, 25c. per 100 lbs.	

Comparative Values

Index numbers compiled from twenty-three typical oils, fats and greases on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
142.4	139.2	134.6	150.2

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Vegetable Oils

Chinawood.—A firmer tone developed in domestic markets and at times the tendency of prices was upward although changes for the week were small. A somewhat better inquiry was noted but there were few transactions of importance reported. Conditions prevailing abroad underwent little change, offerings being light with shippers firm. Primary quotations were still said to be above a parity with those prevailing in domestic markets. San Francisco reported arrivals of 410 tons from Hankow and 300 tons from Shanghai. Exports from Hankow during August were equal to 25,340 barrels, of which 23,517 went to the United States.

Coconut.— Quieter conditions prevailed in domestic markets last week, the easier position of some competing products making consumers disposed to hold off for further developments in the situation. The ruling tone was steady, however, and prices showed little change. Offerings from importers here were generally light and refiners on the coast were not inclined to push matters. There were no new developments of importance reported in the Far Eastern market for copra and coconut oil. Arrivals of the former product at Manila are reported to have been liberal recently.

Corn. — The Western market for crude was firmer early in the week, but later on, owing to the easier position of cottonseed oil, offerings were somewhat larger, small concessions being available. Production in the West is still said to be below normal.

Olive.—Continued strength of foots was reported abroad and the market here was firmer, spot quotations showing a further advance of ¼c. per pound. Offerings were light on spot and for arrival. Denatured oil was firm with a somewhat better inquiry noted. Higher prices were demanded in some quarters for edible oil.

Palm.—The further rise in tallow was reflected in an increased inquiry and the market was firmer. Offerings for arrival were light with sellers bullish in their views. There was little doing on spot as supplies are small, quotations being largely nominal.

Rapeseed.—Demand for refined was rather light and the market continued easy though offerings for shipment were lighter. Exports of seed from India to the United Kingdom and the Continent from January 1 to August 29 were 72,425 tons against 59,275 tons in the corresponding period last year.

Soya Bean.—Crude was quiet on the Coast with offerings small and quotations generally nominal. The market here was quiet and steady.

Current prices on oils, fats, and greases, formerly printed on page 3, are now printed at the end of this market report.

Exports of Oil Cake and Meal

Exports from New York last week were:—

	Pounds	
	Oil cake.	Oil meal.
Friday	....	....
Saturday	600,160	....
Monday	6,028,160	....
Tuesday	....	....
Wednesday	....	....
Thursday	....	....
Totals	6,328,320	....
Since January 1—		
This year	265,647,020	2,359,952
Last year	225,666,368	5,037,000

Chicago Vegetable Oils

CHICAGO, Sept. 14, 1928.

There was irregularity of price structure in the Chicago vegetable oil market, with some prices being off considerably, but later rallying. It was hard to ascribe a definite trend to the market. Buyers were taking material in such a way that the market looked spotty. On coconut oil the tone was steadier than on some of the other material. Coconut was having a brisk inquiry.

Ruling quotations per pound were:—

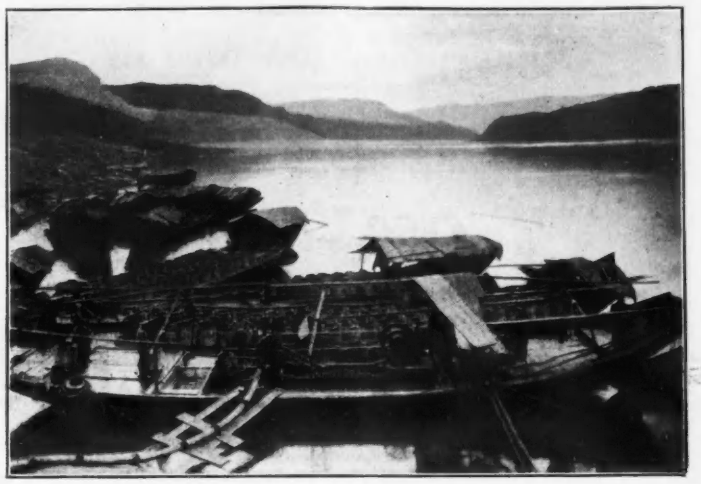
COCONUT (sellers' tanks).—Any shipment this year, 7⅝c., with some sellers offering at 7⅞c.; acidulated oil, 7c.; edible, 10½c. to 10¾c.; barrels, less than car lots, 11½c. to 12c.

CORN (sellers' tanks).—Low acid last sold for 8⅝c., with later offerings 9c.; edible, barrels, car lots, 10¾c. to 11¼c.; barrels, less than car lots, 11.5c. to 12.1c.

(Continued on page 40B)

Valuable information on Imports and Exports of Oils and Oil Materials is given in port lists beginning on page 5.

A Modern Touch in Ancient China



A modern efficient gasoline engine mounted on a venerable river junk speeds up the handling of Werner G. Smith Co. Wood Oil at Wanhsien, 600 miles inland from Hankow. From this point on, junks and baskets are eliminated and W. G. S. Co. Oil travels in tank steamers.

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2191 West 110th Street Cleveland, Ohio

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STEARIC ACID RED OIL
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In addition to our regular line of single pressed and double pressed, distilled STEARIC ACID and RED OIL (Oleic Acid), we have taken over the manufacture of
IVORY BRAND
TRIPLE PRESSED STEARIC ACID
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STAR BRAND (Saponified) RED OIL
Formerly made by The RUB-NO-MORE CO.
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FOR ALL PURPOSES
STEARIC ACID
THE M. WERK CO.
CINCINNATI, O. U.S.A.
ESTABLISHED · · · · · 1832

Offer motorists **extra** value with **OPALINE**.. the **extra** service motor oil ..... WHEN you become an Authorized Opaline Dealer, you get the exclusive Opaline method for recommending motor oil. This method assures a motorist the right grade of *Opaline to seal the power in his pistons*—that's an *extra* service which Opaline does—that's an *extra* service you give your customers—an *extra* reason why they should keep coming back to you for gas and oil. May we tell you about this common-sense method of selling *precision* in lubrication?

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SINCLAIR REFINING COMPANY, INC.

Also Makers of Sinclair Gasoline and H-C Gasoline

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Petroleum and ITS Products

Pennsylvania Crude Prices Advanced — Easier Gasoline Market as Demand Ebbs—Fuel Oil Outlook Improved

With Pennsylvania posted prices for crude 15c. per barrel higher, improvement in the outlook in the crude petroleum division developed last week. Somerset crude was 5c. a barrel higher. The gasoline market was still in precarious position, however, with indications pointing to a downward price movement in the near future.

A slight reduction in domestic production of crude occurred during the week ended September 8, and it was felt that with a tightening of the curtailment regulations in States where flush production is at its height, output can be held down to the point where heavy overproduction can be guarded against. The return from Europe of several prominent oil company officials was believed to presage the launching of a campaign for world-wide curtailment of crude production, with stabilization of the industry resulting from a more orderly balancing of production and demand.

Weakness in the gasoline position, a seasonal development, has not extended beyond the Group 3 market as yet, although the markets in other sections of the country are showing signs of softening. Some price cutting is reported in the local trade, and Chicago reports during the week also noted a weakening tendency. U. S. Motor gasoline can be bought at North Texas refineries at 9⅛c., with the Oklahoma quotation 9¼c., the latter being ½c. under the high for the year. The current quotation of 11¾c. in the local market, the high for the year, is 3½c. over the ruling price at the start of the year.

Some improvement in the fuel oil situation was looked for with the advent of cooler weather, and the starting of consumption of this oil for home and industrial heating. Reports from manufacturers of oil burning equipment indicate that the volume of new installations during the past summer has been the largest in the history of the industry, not only in respect to the number of new installations, but the percentage gain over previous seasons. Another constructive development in this branch of the market was seen in the proposed curtailment of heavy oil production in Venezuela, which would have a definite bearing upon the supply of cheap fuel oil at Atlantic Coast refining centers.

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Current prices on petroleum products, formerly printed on page 3, are now printed at the end of this market report.

The State of the Petroleum Market

Crude petroleum prices were higher on Pennsylvania grades last week. Gasoline at refineries was without change. Service station prices for gasoline showed no general changes. Comparative details follow:—

	Sept. 14	Sept. 7	Last Year
Crude petroleum prices at well (average for ten fields), per gallon.....	$1.599	$1.584	$1.417
Gasoline price at refinery (average at four refining centers), per gallon....	.1072	.1072	.0791
Gasoline prices at service station (average for ten States), per gallon.....	.2067	.2067	.1905

Commercial production of crude petroleum in domestic fields, as estimated by the Oil, Paint and Drug Reporter, has amounted this year, from January 1 to September 15, to 615,644,000 barrels, compared with 635,453,000 barrels in the corresponding period in 1927. Commercial production is now at the rate of 2,477,100 barrels a day, compared with 2,490,300 daily at this time last year.

Crude Petroleum

A general advance of 15c. a barrel on Pennsylvania grades was made last week. Somerset crude was 5c, a barrel higher. The production curve had again turned downward, and West Texas output was under closer control.

According to reports from the Salt Creek field the White Eagle Oil & Refining Company had posted an offering of a premium of 15c. per barrel for crude in the Salt Creek field, effective September 6. The offer affected about 12,000 barrels, close to 30 percent of the daily output of the field.

Producers & Refiners Corporation has notified operators in the Ferris, Wyoming, fields that it has discontinued the practice of paying Salt Creek prices for crude from the Ferris fields. Hereafter the price must be named by the purchaser at the well.

With the Oklahoma curtailment order in effect, limiting the output of all of the fields in the State to 300,000 barrels daily, it was felt in oil trade circles that the conservation policy was making further progress, and that success might attend the efforts to bring Venezuela into line with a pro rating policy on the part of principal operators in that country.

Test runs made in the Yates and Hendricks pools in West Texas last week showed potential daily production of these pools at 5,750,415 barrels, an increase of 862,368 barrels per day over the previous potential production test. The runs were made under the direction of the Texas Railroad Commission, and were based on short tests at the various wells. Test gauges from 248 wells in the Yates pool place potential production at 3,425,923 barrels daily, while 330 wells in the Hendricks pool have a potential of 2,294,691 barrels a day. During the week ended September 8 the two pools produced 248,650 barrels a day in the aggregate.

Production

With West Texas crude output again brought under control, a decline of 9,050 barrels in average daily domestic crude petroleum output, to 2,494,200 barrels, was shown in estimates of the American Petroleum Institute for the week ended September 8. Details of production with comparison for the previous week and the corresponding week last year, follow:—

	Daily Average in Barrels For Week Ended Sept. 8, 1928.	Sept. 1, 1928.	Sept. 10, 1927.
Oklahoma	706,050	703,800	793,600
Kansas	100,450	100,850	105,550
Panhandle Texas..	65,400	63,550	98,500
North Texas	91,250	95,100	83,050
West Central Texas	55,350	55,750	67,500
West Texas.....	349,800	361,250	176,400
East Central Texas	24,300	22,550	30,400
Southwest Texas..	25,500	25,550	29,250
North Louisiana...	39,150	39,700	54,350
Arkansas	84,350	86,500	101,800

Valuable information on Imports and Exports of Petroleum and Its Products is given in port lists beginning on page 5.

Banish Uncertainty

Insure uniform quality in your naphtha supply

Free your mind of all doubt and uncertainty concerning your naphtha supply.

Shaffer naphthas offer you a superior product of known and uniform quality.

You may select from our standard line or have naphthas made to your own specifications.

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OIL and REFINING COMPANY

General Sales Offices: 300 W. Adams St., Chicago

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OIL FUEL

EFFICIENT - CLEAN - ECONOMICAL

Oil Fuel for Motor Ships' and/or Steamers' bunkers and/or Industrial Purposes is available at the following ports through The Asiatic Petroleum Company, Limited

Aberdeen
Adelaide
*Alexandria
*Amsterdam
Antofagasta
*Antwerp
Aomori
*Avonmouth
*Balboa (Panama Canal)
*Balik Pappan
*Bangkok
*Barton (Manchester Ship Canal)
*Batavia
*Bergen
Boelebaai Ceram
*Bombay
Bumpyo (Korea)
*Brisbane
*Buenos Ayres
*Calcutta
Canton
*Cape Town
*Cebu
*Colombo
*Colon (Panama Canal)
*Constanza
*Copenhagen
*Curacao
*Dover
Falmouth
*Genoa
*Gibraltar
*Glasgow
*Gothenburg
*Granton
*Hamburg
Hankow
*Havana
*Havre
*Hong Kong
Honolulu
*Hull
Ichang
*Iloilo
*Iquique
*Jarrow-on-Tyne
*Karachi
*Kobe
La Guayra (Venezuela)
*Las Palmas
*Leghorn
*Lisbon
*Liverpool
*London (Shell Haven and Thames Haven)
*Macassar
*Madras
*Malmo
*Malta
*Manila
Maracaibo (Venezuela)
*Marseilles
*Melbourne
*Miri
*Mombasa
*Montevideo
*Montreal
Nagasaki
*Naples
*New Orleans
*New York
*Oslo
Palembang
*Palermo
*Pangkalan Berandan
*Penang
Perim
Pernambuco
*Piraeus
Portishead
*Portland (Oregon)
*Port Said
Port Sudan
Puerto Mexico
Quebec
*Rio de Janeiro
*Rotterdam
*Rouen
Sabang
*Saigon
*St. Nazaire
*St. Vincent
Saltosaki
*San Francisco
*San Juan (Porto Rico)
*San Pedro (Los Angeles Harbour)
Santos
*Seattle (Washington)
*Shanghai
*Singapore
*Singapore (Pulo Bukom)
*Singapore (Pulo Samboe)
*Singapore (Tanjong Pagar)
*Sourabaya
*Southampton
*Stanlow
*Stockholm
*Suez
Swilvaer
*Sydney
*Tampico
Tarakan
*Trieste
Trinidad
Tuxpan
Vado
*Valparaiso
*Vancouver
*Venice
Vera Cruz
*Wellington (N. Z.)
*Yokohama

* Lubricating Oils for Marine purposes are also available at these stations

New station are expected to be ready shortly at Auckland, Hikoshima (Shimonoseki)

BUYERS desiring information regarding supplies of and price of **Oil Fuel** for use in Internal-combustion Engines or other purposes should apply to **The Asiatic Petroleum Co., Ltd.,** at the address below.

THE Asiatic Petroleum Company also supply **Kerosene Oil** for use in the smaller Internal-combustion Engines and are prepared to supply **Petroleum Spirits, Wax, Asphalt** and **Greases** throughout the World.

THE ASIATIC PETROLEUM COMPANY
LIMITED
St. Helen's Court, Gt. St. Helen's, London, England

	Daily average in barrels—For week ended Sept. 8, 1928.	Sept. 1, 1928.	Sept. 10, 1927.
Coastal Texas	107,100	105,250	123,450
Coastal Louisiana	21,950	23,350	16,800
Eastern	113,000	113,000	112,000
Wyoming	55,750	57,200	50,450
Montana	9,750	9,850	12,350
Colorado	7,050	7,400	7,900
New Mexico	2,300	3,600	2,650
California	635,800	629,000	639,400
Totals	2,494,200	2,503,250	2,505,400

The estimated daily average gross production of the Mid-Continent field including Oklahoma, Kansas, Panhandle, North, West Central, West, East Central and Southwest Texas, North Louisiana and Arkansas, for the week ended September 8 was 1,541,500 barrels, as compared with 1,554,600 barrels for the preceding week, a decrease of 13,100 barrels. The Mid-Continent production, excluding Smackover, Arkansas heavy oil, was 1,485,150 barrels, as compared with 1,498,150 barrels, a decrease of 13,000 barrels.

Eastern Pipeline Movements

Field runs and pipeline deliveries in New York, Pennsylvania, West Virginia, Kentucky, Tennessee, Ohio and Indiana of latest record are as follows:—

Runs

	Barrels—Day.	Month.
September 5	56,364	245,560
September 6	79,146	324,706
September 7, 8 and 9	65,766	390,472
September 10	99,942	490,414
September 11	20,243	510,647

Deliveries

	Barrels—Day.	Month.
September 6	138,419	370,506
September 7	111,929	482,435
September 8, 9 and 10	87,991	570,426
September 11	197,369	767,795
September 12	101,195	868,990

Monthly Totals, 1928

	Barrels—Runs.	Deliveries.
January	1,463,163	1,531,512
February	1,243,949	1,372,114
March	1,782,134	1,709,867
April	1,374,186	1,695,911
May	1,493,922	1,877,417
June	1,492,713	1,872,768
July	1,394,834	1,743,840
August	1,858,518	1,284,805

Monthly Totals, 1927

	Barrels—Runs.	Deliveries
January	1,742,480	4,378,019
February	1,556,486	1,724,540
March	1,749,902	2,176,842
April	1,810,099	1,749,770
May	1,868,809	4,491,719
June	1,562,285	1,792,841
July	1,460,030	1,879,345
August	1,586,039	1,782,860
September	1,209,684	1,432,652
October	1,233,047	1,460,908
November	1,645,073	1,412,412
December		

Imports

Imports of crude and refined petroleum for August, according to the American Petroleum Institute, were 7,221,000 barrels, an average of 232,935 barrels a day, as compared with 7,570,000 barrels, of 244,194 barrels daily, for the previous month. Imports for the week ended September totaled 2,165,000 barrels, an average of 309,285 barrels a day, compared with 1,571,000 barrels, a daily average of 224,429 barrels, for the week ended September 1. Comparative details follow:—

	Barrels received—Week ended Sept. 8.	Week ended Sept. 1.	Total month August.
At Atlantic Coast Ports:—			
Baltimore	309,000	226,000	784,000
Boston	157,000	*217,000	506,000
New York	843,000	836,000	3,820,000
Philadelphia	274,000	151,000	670,000
Others	263,000	....	223,000
Totals	1,846,000	1,430,000	6,003,000
Daily average	263,714	204,286	193,645
At Gulf Coast Ports:—			
Galveston District	....	....	....
New Orleans and Baton Rouge	319,000	141,000	1,199,000
Port Arthur and Sabine District.	....	....	....
Tampa	....	....	19,000
Totals	319,000	141,000	1,218,000
Daily average	45,571	20,143	39,290
At all United States Ports:—			
Total	2,165,000	1,571,000	7,221,000
Daily average	309,285	224,429	232,935

*Revised.

Movement of California Oil

Receipts of California crude and refined petroleum at Gulf Coast and Atlantic ports in August were 2,184,000 barrels, an average of 70,451 barrels a day, against 1,739,000 barrels, or 56,096 barrels daily, in the previous month Receipts for the week ended September 8 were 381,000 barrels, an average of 54,429 barrels daily, as contrasted with 144,000 barrels, a daily average of 20,571 barrels a day for the previous week. Comparative details follow:—

	Barrels received—Week ended Sept. 8.	Week ended Sept. 1.	Total month August.
At Atlantic Coast Ports:—			
Baltimore	563,000	190,000	68,000
Boston	112,000	....	....
New York	861,000	....	76,000
Philadelphia	548,000	160,000	....
Others	75,000	31,000	....
Totals	2,159,000	381,000	144,000
Daily average	69,645	54,429	20,571
At Gulf Coast Ports	25,000	....	....
Daily average	806	....	....
Total—Atlantic and Gulf Coast Ports	2,184,000	381,000	144,000
Daily average	70,451	54,429	20,571
Oils Received			
Crude	112,000	....	....
Gasoline	1,688,000	381,000	144,000
Gas Oil	290,000	....	....
Fuel Oil	....	....	....
Lubricating	....	....	....
Tops	94,000	....	....
Totals	2,184,000	381,000	144,000

Price Changes in Past Month

September 1—Crude in Stoll lines at Oil City, Ky., advanced 10c. a barrel.

September 14—Pennsylvania crude advanced 15c. a barrel.

September 14—Somerset crude advanced 5c. a barrel.

Prices at Well

The following prices are those paid by the pipelines for crudes as delivered from the wells, with a comparison for the corresponding period of 1927:—

Pennsylvania-Ohio-West Virginia*

	Per barrel—1928.	1927.
Cabell, W. Va.	$1.45	$1.40
Corning, Ohio	1.80	1.45
†Lima	1.60	1.71
Pennsylvania—		
In N. Y. Transit lines	3.35	2.65
Bradford oil in Natl. Transit lines	3.35	2.65
Other Pa. oil in Natl. Transit lines	3.25	2.55
In Southwest Penn lines	3.25	2.55
In Eureka lines	3.15	2.50
In Buckeye lines	3.00	2.35
Gaines, Pa.	2.25	2.25
Kelster, Pa.	1.20	1.10
†Wooster, Ohio	1.67	1.57

* Posted by Joseph Seep Purchasing Agency.
† Posted by Ohio Oil Company.

Oklahoma-Kansas-North, East and Central Texas*

		Per barrel—1928.	1927.
Midcontinent, 24 deg. and low		.60	1.05@1.12
25 deg. to 25.9 deg.		.67	1.05@1.12
26 deg. to 26.9 deg.		.74	1.05@1.12
27 deg. to 27.9 deg.	.75@	.81	1.05@1.12
28 deg. to 28.9 deg.	.75@	.88	1.05@1.14
29 deg. to 29.9 deg.	.75@	.95	1.05@1.16

Oklahoma-Kansas-North, East and Central Texas*—(Continued)

	Per barrel—1928.	1927.
Midcontinent (Cont'd)—		
30 deg. to 30.9 deg.	.90	1.02@ —
31 deg. to 31.9 deg.	1.05	1.09@ —
32 deg. to 32.9 deg.	1.16	1.05@1.22
33 deg. to 33.9 deg.	1.21	1.07@1.24
34 deg. to 34.9 deg.	1.26	1.09@1.26
35 deg. to 35.9 deg.	1.31	1.11@1.28
36 deg. to 36.9 deg.	1.36	1.13@1.30
37 deg. to 37.9 deg.	1.41	1.15@1.32
38 deg. to 38.9 deg.	1.46	1.17@1.34
39 deg. to 39.9 deg.	1.51	1.19@1.36
40 deg. to 40.9 deg.	1.56	1.21@1.38
41 deg. to 41.9 deg.	1.61	1.23@1.40
42 deg. to 42.9 deg.	1.66	1.25@1.42
43 deg. to 43.9 deg.	1.71	1.27@1.44
44 deg. to 44.9 deg.	1.76	1.29@1.46
45 deg. to 45.9 deg.	1.81	1.31@1.48
46 deg. to 46.9 deg.	1.86	1.33@1.50
47 deg. to 47.9 deg.	1.91	1.35@1.52
48 deg. to 48.9 deg.	1.96	1.37@1.54
49 deg. to 49.9 deg.	2.01	1.39@1.56
50 deg. to 50.9 deg.	2.06	1.41@1.58
51 deg. to 51.9 deg.	2.11	1.43@1.60
52 deg. and above	2.16	1.45@1.62
Corsicana	1.25	1.25

* Posted by Sinclair Oil and Gas Company, Cosden Pipe Line Company, Champlin Refining Company, Gypsy Oil Company, Marland Oil Company, Prairie Oil & Gas Company, Humble Oil & Refining Company, Texas Company, and Carter Oil Company.
(Note:—Inside prices in above schedule posted only by Magnolia Petroleum Company.)

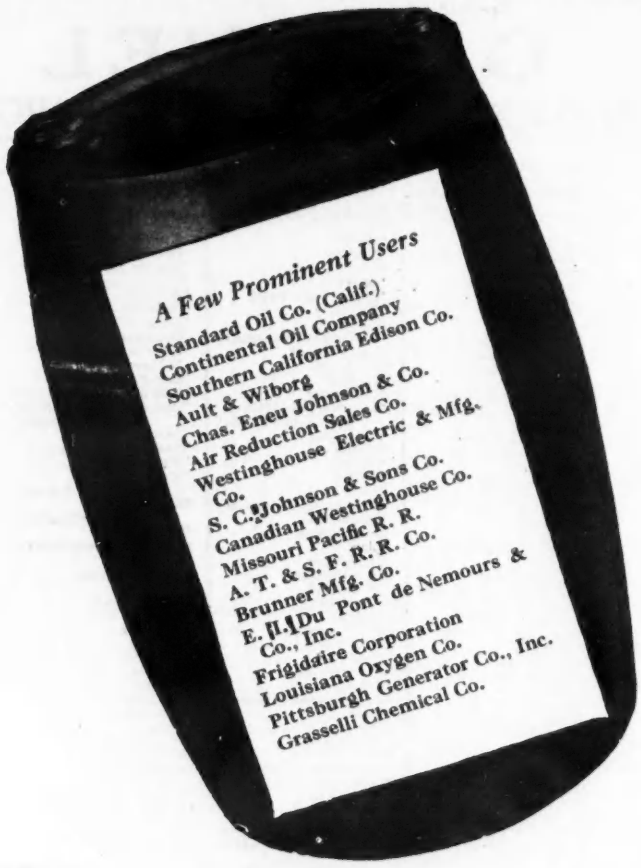
West Texas*

Crane, Upton, Winkler, Pecos and Crockett counties, all gravities	.65	.70@ .92
Glasscock county	.60@ .89	.80
Iatan (all gravities)	.93	1.30

* Posted by Kay County Gas Company and Humble Oil & Refining Company.

Texas Panhandle*

Carson and Hutchinson counties—		
Below 32 deg.	.69	.93
32 deg. to 32.9 deg.	.76	.95
33 deg. to 33.9 deg.	.81	.95
34 deg. to 34.9 deg.	.86	.95
35 deg. to 35.9 deg.	.91	.95
36 deg. to 36.9 deg.	.96	.95
37 deg. to 37.9 deg.	1.01	.95
38 deg. to 38.9 deg.	1.06	.95
39 deg. to 39.9 deg.	1.11	.95
40 deg. to 40.9 deg.	1.16	.95
41 deg. to 41.9 deg.	1.21	.95
42 deg. to 42.9 deg.	1.26	.95
43 deg. to 43.9 deg.	1.31	.95
44 deg. and above	1.36	.95
Wheeler county—		
Below 30 deg.	.65	.80
30 deg. to 30.9 deg.	.72	.84
31 deg. to 31.9 deg.	.79	.86
32 deg. to 32.9 deg.	.86	.88
33 deg. to 33.9 deg.	.91	.90
34 deg. to 34.9 deg.	.96	.92
35 deg. to 35.9 deg.	1.01	.94
36 deg. to 36.9 deg.	1.06	.96
37 deg. to 37.9 deg.	1.11	.98
38 deg. to 38.9 deg.	1.16	1.00
39 deg. to 39.9 deg.	1.21	1.02
40 deg. to 40.9 deg.	1.26	1.04
41 deg. to 41.9 deg.	1.31	1.06
42 deg. to 42.9 deg.	1.36	1.08
43 deg. to 43.9 deg.	1.41	1.10
44 deg. and above	1.46	1.12


A Few Prominent Users
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Continental Oil Company
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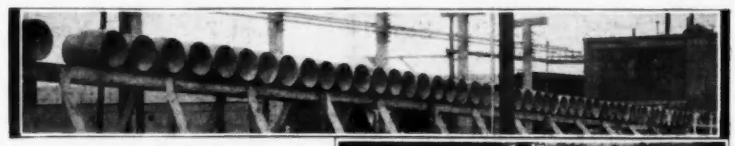
Chas. Eneu Johnson & Co.
Air Reduction Sales Co.
Westinghouse Electric & Mfg. Co.
S. C. Johnson & Sons Co.
Canadian Westinghouse Co.
Missouri Pacific R. R.
A. T. & S. F. R. R. Co.
Brunner Mfg. Co.
E. I. Du Pont de Nemours & Co., Inc.
Frigidaire Corporation
Louisiana Oxygen Co.
Pittsburgh Generator Co., Inc.
Grasselli Chemical Co.



Kodak Park, where Hackney Barrels are cutting costs for the Eastman Kodak Company

If It Isn't a Hackney it lacks the following cost cutting Hackney features — *for no other steel barrel has* —

The simple, strong, leakproof, easily removed head. The full, unobstructed opening when the head is removed. The smooth, strong bottom chime construction. The uniformly thick walls and sturdy bilged sides—free from all seams, welds, rivets and sharp corners.

The Eastman Kodak Company, like other large industrial leaders, were quick to appreciate this fact, and what it meant to them in improved service and lower shipping costs. It will pay you to investigate these facts in the interest of *your own* costs and service.

PRESSED STEEL TANK COMPANY
1143 Continental Bank Building - - - Chicago
1319 Vanderbilt Concourse Building, New York City
5721 Greenfield Avenue - - - - Milwaukee, Wis.

Hackney
MILWAUKEE

Texas Panhandle* (Cont'd)

	Per barrel 1928.	1927.
Gray county—		
Below 29 deg.	.68	.80
29 deg. to 29.9 deg.	.73	.82
30 deg. to 30.9 deg.	.78	.84
31 deg. to 31.9 deg.	.83	.86
32 deg. to 32.9 deg.	.96	.88
33 deg. to 33.9 deg.	1.01	.90
34 deg. to 34.9 deg.	1.06	.92
35 deg. to 35.9 deg.	1.11	.94
36 deg. to 36.9 deg.	1.16	.96
37 deg. to 37.9 deg.	1.21	.98
38 deg. to 38.9 deg.	1.26	1.00
39 deg. to 39.9 deg.	1.31	1.02
40 deg. to 40.9 deg.	1.36	1.04
41 deg. to 41.9 deg.	1.41	1.06
42 deg. to 42.9 deg.	1.46	1.08
43 deg. to 43.9 deg.	1.51	1.10
44 deg and above	1.56	1.12
†Panola county—		
32 deg. to 32.9 deg.	.96	.96
33 deg. to 33.9 deg.	.98	.98
34 deg. to 34.9 deg.	1.00	1.00
35 deg. to 35.9 deg.	1.02	1.02
36 deg. to 36.9 deg.	1.04	1.04
37 deg. to 37.9 deg.	1.06	1.06
38 deg. and above	1.08	1.08

* Posted by Humble Oil & Refining Company, Gulf Pipe Line Company, Magnolia Petroleum Company, and Kay County Gas Company.
† Posted by Sun Oil Company and National Refining Company.

Indiana-Illinois*

Illinois	1.55	1.77
Indiana	1.37	1.47
Plymouth Ill.	1.28	1.33
Princeton, Ind.	1.55	1.60
Waterloo	1.25	1.35
Saginaw (Mich.)	1.90@2.05	2.03

* Posted by Ohio Oil Company.

Kentucky-Tennessee*

Ragland	.95	95
Somerset grade in Cumberland lines	1.75	1.50

* Posted by Joseph Seep Purchasing Agency.

Gulf Coast*

(Goose Creek, Hull, Liberty, West Columbia, Orange, Boling, Sour Lake, Pierce Junction, and Spindletop Junction.)

Grade A	1.20	1.20
Grade B, 25 deg. to 25.9 deg.	1.15	1.15
26 deg. to 26.9 deg.	1.17	1.17
27 deg. to 27.9 deg.	1.19	1.19
28 deg. to 28.9 deg.	1.21	1.21
29 deg. to 29.9 deg.	1.23	1.23
30 deg. to 30.9 deg.	1.25	1.25
31 deg. to 31.9 deg.	1.27	1.27
32 deg. to 32.9 deg.	1.29	1.29
33 deg. to 33.9 deg.	1.31	1.31
34 deg. to 34.9 deg.	1.33	1.33
35 deg. to 35.9 deg.	1.35	1.35
†36 deg. to 36.9 deg.	1.37	1.37
37 deg. to 37.9 deg.	1.39	1.39
38 deg. to 38.9 deg.	1.41	1.41
39 deg. to 39.9 deg.	1.43	1.43
40 deg. and above	1.45	1.45
Laredo	.95	95
Piedras Pintas	1.85	1.85
Evangeline	1.15	1.15
Jennings, La.	1.05	1.15
Saratoga, Batson, Dayton	1.20	1.40

* Posted by Humble Oil & Refining Company, Gulf Pine Line Company, Magnolia Petroleum Corporation, Texas Company and Sun Pipe Line Company.
† 36 deg. and higher posted only by Texas Company.

South, Central and Southwestern Texas*

Luling	1.00	1.00
Mirando	1.00	1.00
Rockdale-Minerva—		
below 38 deg.	1.25	1.25
38 deg. to 38.9 deg.	1.27	1.25
39 deg. to 39.9 deg.	1.29	1.25
40 deg. and above	1.31	1.25
†Thrall	...	...
Callinan	1.75	1.75
**Somerset—		
32 deg. to 32.9 deg.	1.05	1.05
33 deg. to 33.9 deg.	1.07	1.07
34 deg. to 34.9 deg.	1.09	1.09
35 deg. to 35.9 deg.	1.11	1.11
36 deg. to 36.9 deg.	1.13	1.13
37 deg. to 37.9 deg.	1.15	1.15
38 deg. and above	1.17	1.17
*Lytton Springs—		
Below 33 deg.	1.05	..
33 deg. to 33.9 deg.	1.07	...
34 deg. to 34.9 deg.	1.09	...
35 deg. to 35.9 deg.	1.11	...
36 deg. to 36.9 deg.	1.13	...
37 deg. to 37.9 deg.	1.15	...
38 deg. to 38.9 deg.	1.17	...
39 deg. to 39.9 deg.	1.19	...
40 deg. to 40.9 deg.	1.21	...
41 deg. to 41.9 deg.	1.23	...
42 deg. to 42.9 deg.	1.25	...
43 deg. to 43.9 deg.	1.27	...
44 deg. to 44.9 deg.	1.29	...
45 deg. to 45.9 deg.	1.31	...
46 deg. to 46.9 deg.	1.33	...
47 deg. to 47.9 deg.	1.35	...
48 deg. to 48.9 deg.	1.37	...
49 deg. to 49.9 deg.	1.39	...
50 deg. to 50.9 deg.	1.41	...
51 deg. to 51.9 deg.	1.43	...
52 deg. and above	1.45	...

* Posted by Texpata Pipe Line Company, Humble Pipe Line Company and Magnolia Petroleum Company.
† Same as Midcontinent, less 19½c. per 100 pounds freight.
** Posted by Grayburg Pipe Line Company and Pioneer Oil and Refining Company.

California*

Signal Hill, Huntington Beach, Inglewood†, Olinda-Brea Canyon, Torrance and Richfield—		
14 deg. to 14.9 deg.	.85	.85
15 deg. to 15.9 deg.	.85	.85
16 deg. to 16.9 deg.	.85	.85
17 deg. to 17.9 deg.	.85	.85
18 deg. to 18.9 deg.	.85	.85
19 deg. to 19.9 deg.	.85	.85
20 deg. to 20.9 deg.	.85	.85
21 deg. to 21.9 deg.	.89	.86
22 deg. to 22.9 deg.	.93	.87
23 deg. to 23.9 deg.	.97	.88
24 deg. to 24.9 deg.	1.01	.89
25 deg. to 25.9 deg.	1.05	.90
26 deg. to 26.9 deg.	1.09	.92
27 deg. to 27.9 deg.	1.13	.94
28 deg. to 28.9 deg.	1.17	.96
29 deg. to 29.9 deg.	1.21	.98
30 deg. to 30.9 deg.	1.25	1.00
31 deg. to 31.9 deg.	1.30	1.03
32 deg. to 32.9 deg.	1.35	1.06

† Inglewood posted only up to 28.9 degrees; Olinda-Brea Canyon to 30.9 degrees. Montebello, Whittier† and La Habra†—

14 deg. to 20.9 deg.	.85	.85
21 deg. to 21.9 deg.	.89	.85
22 deg. to 22.9 deg.	.92	.85
23 deg. to 23.9 deg.	.95	.85
24 deg. to 24.9 deg.	.98	.85
25 deg. to 25.9 deg.	1.01	.86
26 deg. to 26.9 deg.	1.04	.87
27 deg. to 27.9 deg.	1.07	.88
28 deg. to 28.9 deg.	1.10	.89
29 deg. to 29.9 deg.	1.13	.90
30 deg. and above	1.16	.91

† Whittier and La Habra posted only to 22.9 degrees.

Athens, Rosencrans, and Dominguez—

24 deg. to 24.9 deg.	1.01	.89
25 deg. to 25.9 deg.	1.05	.90
26 deg. to 26.9 deg.	1.09	.92
27 deg. to 27.9 deg.	1.13	.94
28 deg. to 28.9 deg.	1.17	.96
29 deg. to 29.9 deg.	1.21	.98
30 deg. to 30.9 deg.	1.25	1.00
31 deg. to 31.9 deg.	1.30	1.03
32 deg. to 32.9 deg.	1.35	1.06
33 deg. to 33.9 deg.	1.41	1.09
34 deg. to 34.9 deg.	1.47	1.12
35 deg. to 35.9 deg.	1.53	1.15
36 deg. to 36.9 deg.	1.59	1.18
37 deg. to 37.9 deg.	1.65	1.21
38 deg. to 38.9 deg.	1.71	1.24
39 deg. to 39.9 deg.	1.77	1.27
40 deg. to 40.9 deg.	1.83	1.30
41 deg. to 41.9 deg.	1.89	1.33
42 deg. to 42.9 deg.	1.95	1.36

Coyote Hills—

14 deg. to 20.9 deg.	.85	.85
21 deg. to 21.9 deg.	.88	.85
22 deg. to 22.9 deg.	.91	.87
23 deg. to 23.9 deg.	.94	.88
24 deg. to 24.9 deg.	.97	.89
25 deg. to 25.9 deg.	1.00	.90
26 deg. to 26.9 deg.	1.04	.91
27 deg. to 27.9 deg.	1.08	.92
28 deg. to 28.9 deg.	1.12	.93
29 deg. to 29.9 deg.	1.16	.94
30 deg. to 30.9 deg.	1.20	.95

Santa Fe Springs—

21 deg. to 24.9 deg.	.85	.85
25 deg. to 25.9 deg.	.89	.86
26 deg. to 26.9 deg.	.92	.87
27 deg. to 27.9 deg.	.95	.88
28 deg. to 28.9 deg.	.98	.89
29 deg. to 29.9 deg.	1.01	.91
30 deg. to 30.9 deg.	1.04	.93
31 deg. to 31.9 deg.	1.07	.95
32 deg. to 32.9 deg.	1.10	.97
33 deg. to 33.9 deg.	1.15	.99
34 deg. to 34.9 deg.	1.20	1.01
35 deg. to 35.9 deg.	1.25	1.03
36 deg. to 36.9 deg.	1.30	1.06
37 deg. to 37.9 deg.	1.35	1.09
38 deg. and above	1.40	1.12
39 deg. to 39.9 deg.	1.45	1.15

Midway-Sunset - Elk Hills, Lost Hills, Kern River†, Newhall†, McKittrick† and Buena Vista Hill—

14 deg. to 19.9 deg.	.75	.75
20 deg. to 20.9 deg.	.77	.77
21 deg. to 21.9 deg.	.79	.79
22 deg. to 22.9 deg.	.82	.81
23 deg. to 23.9 deg.	.86	.83
24 deg. to 24.9 deg.	.90	.85
25 deg. to 25.9 deg.	.95	.87
26 deg. to 26.9 deg.	1.00	.89
27 deg. to 27.9 deg.	1.05	.91
28 deg. to 28.9 deg.	1.10	.93
29 deg. to 29.9 deg.	1.16	.96
30 deg. to 30.9 deg.	1.22	.99
31 deg. to 31.9 deg.	1.28	1.02
32 deg. to 32.9 deg.	1.34	1.05
33 deg. to 33.9 deg.	1.40	1.08

† Newhall, McKittrick and Kern River posted only to 19.9 degrees; Midway, Sunset, Elk Hills and Buena Vista Hills to 33.9 degrees.

Wheeler Ridge and Coalinga—

14 deg. to 19.9 deg.	.75	.75
20 deg. to 20.9 deg.	.77	.76
21 deg. to 21.9 deg.	.79	.77
22 deg. to 22.9 deg.	.82	.78
23 deg. to 23.9 deg.	.85	.79
24 deg. to 24.9 deg.	.88	.80
25 deg. to 25.9 deg.	.91	.81
26 deg. to 26.9 deg.	.94	.82
27 deg. and above	.98	.83
28 deg. to 28.9 deg.	1.02	.85
29 deg. to 29.9 deg.	1.06	.87
30 deg. to 30.9 deg.	1.10	.89
31 deg. to 31.9 deg.	1.14	.91
32 deg. to 32.9 deg.	1.18	.93
33 deg. to 33.9 deg.	1.22	.95
34 deg. to 34.9 deg.	1.26	.97
35 deg. and above	1.30	.99

* California fields posted by Standard Oil of California and Union Oil Company.

Louisiana and Arkansas*

Bellevue	1.25	1.25
Bull Bayou, Caddo, Haynesville, El Dorado, Homer, Crichton, De Soto—		
28 deg. and below	.81	1.10
28 deg. to 28.9 deg.	.88	1.12
29 deg. to 29.9 deg.	.95	1.14
30 deg. to 30.9 deg.	1.02	1.16
31 deg. to 31.9 deg.	1.09	1.18
32 deg. to 32.9 deg.	1.16	1.20
33 deg. to 33.9 deg.	1.21	1.22
34 deg. to 34.9 deg.	1.26	1.24
35 deg. to 35.9 deg.	1.31	1.26
36 deg. to 36.9 deg.	1.36	1.28
37 deg. to 37.9 deg.	1.41	1.30
38 deg. to 38.9 deg.	1.46	1.32
39 deg. to 39.9 deg.	1.51	1.34
40 deg. to 40.9 deg.	1.56	1.36
41 deg. to 41.9 deg.	1.61	1.38
42 deg. to 42.9 deg.	1.66	1.40
43 deg. to 43.9 deg.	1.71	1.42
44 deg. and above	1.76	1.44@1.60
Pine Island	1.40	1.40
Smackover, below 24 deg.	.75	1.00
24 deg. and above	.90	1.25
‡Stephens, below 28 deg.	.75	1.10
28 deg. to 28.9 deg.	.79	1.20
29 deg. to 29.9 deg.	.84	1.24
30 deg. to 30.9 deg.	.87	1.28
31 deg. to 31.9 deg.	.91	1.32
32 deg. and above	.95	1.36
†Urania	.85	1.00
**Calion (East El Dorado)	.90	1.00
**Starks Dome, La.	1.40	1.40
Cotton Valley		
28 deg. and below	.81	1.00
28 deg. to 28.9 deg.	.88	1.00
29 deg. to 29.9 deg.	.95	1.00
30 deg. to 30.9 deg.	1.02	1.00
31 deg. to 31.9 deg.	1.09	1.00
32 deg. to 32.9 deg.	1.16	1.00
33 deg. to 33.9 deg.	1.21	1.00
34 deg. to 34.9 deg.	1.26	1.00
35 deg. to 35.9 deg.	1.31	1.00
36 deg. to 36.9 deg.	1.36	1.00
37 deg. to 37.9 deg.	1.41	1.00
38 deg. to 38.9 deg.	1.46	1.00
39 deg. to 39.9 deg.	1.51	1.00
40 deg. to 40.9 deg.	1.56	1.00
41 deg. to 41.9 deg.	1.61	1.00
42 deg. to 42.9 deg.	1.66	1.00

Louisana-Arkansas*—(Cont'd)

	Per barrel 1928.	1927.
Cotton Valley (Cont'd)—		
43 deg. to 43.9 deg.	1.71	1.00
44 deg. and above	1.76	1.00
24 deg. and above	.90	1.15@1.21

* Posted by—The Texas Company, Standard Oil Company of Louisiana, Gulf Pipe Line Company, Magnolia Petroleum Company.
** Posted by Gulf Pipe Line Company only.
† Posted by Paragon Development Company.
‡ Posted by Atlantic Oil Producing Company.

Western Kentucky*

Western Kentucky, all gravities	1.48	1.33
‡Clay county, Tenn.	1.50	1.50
‡Cumberland, Barren and Monroe counties	1.50	1.50
†Oil in lines of Stoll Oil Refining Company in Oil City, Ky.	1.65	1.50

* Posted by Indian Refining Company and Ohio Oil Company.
† Posted by Stoll Oil Refining Company.
‡ Posted by Paragon Development Company.

Rocky Mountain*

Big Muddy	1.33	1.25
Byron	1.33	2.50
Cat Creek	1.33	1.33
Elk Basin	1.48	1.33
Greybull	1.33	1.33
Hamilton Dome	.85	1.33
Kevin	1.20	1.20
Lance Creek	1.48	1.33
Lake Basin	2.20	2.25
Grass Creek, light	1.48	1.33
heavy	.90	.90
Lander	.80	2.10
Lost Soldier	.95	1.60
Mule Creek	1.10	1.30
Notches	.65	.65
Osage	1.33	1.53
Poison Spider	1.00	1.00
Rock Creek	1.33	1.30
†Salt Creek—		
28 deg. to 28.9 deg.	.88	1.12
29 deg. to 29.9 deg.	.95	1.14
30 deg. to 30.9 deg.	1.02	1.16
32 deg. to 32.9 deg.	1.09	1.20
33 deg. to 33.9 deg.	1.21	1.22
34 deg. to 34.9 deg.	1.26	1.24
35 deg. to 35.9 deg.	1.31	1.26
36 deg. to 36.9 deg.	1.36	1.28
37 deg. to 37.9 deg.	1.41	1.34
38 deg. to 38.9 deg.	1.46	1.32
39 deg. to 39.9 deg.	1.51	1.34
40 deg. to 40.9 deg.	1.56	1.36
41 deg. to 41.9 deg.	1.66	1.38
42 deg. to 42.9 deg.	1.66	1.40
43 deg. to 43.9 deg.	1.71	1.42
44 deg. and above	1.76	1.44@1.60
Sunburst	1.65	1.50
Torchlight	1.33	2.00
Hogback, N. Mex.	1.38	1.40
Artesia, N. Mex.	1.00	1.00
Rex Lake	1.10	1.10
*Florence, Colo.	1.60	1.60
*Moffatt, Colo.	.85	.85
Tow Creek, Colo.	.72	.72
Ferris	1.60	..
Pilot Butte	1.75	..
Simpson Ridge	.80	..
South Casper Creek	1.00	..

* Posted by Texas Company.
† Posted by Midwest Refining Company and Ohio Oil Company.
(Note:—Usage, Cat Creek, Salt Creek and Hexback posted by Midwest Refining Company; remainder by Ohio Oil Company, unless otherwise noted; Grass Creek and Elk Basin posted by both companies.)

Canada*

Oil Springs	2.07	2.18
Petrolia	2.00	2.11
(Add 26½c. per barrel to each grade to include allowance by government to producers.)		

* Posted by Imperial Oil Company, Ltd.

Mexico

F.o.b. terminals Mexican ports (based on contract)—		
* Tuxpam	.93	1.35
† Panuco	1.10	1.16

* Plus 26.35 cents tax.
† Plus 15.373 cents tax.

Refinery Products

Motor gasoline prices had steadied somewhat in the Midcontinent and further price reductions were lacking. Demand had slowed down, however, and it was expected that prices would recede further, unless refiners should radically curtail their output. The situation in the local market showed no change, although the market tone had softened somewhat.

Firmness featured the kerosene market, with active trading noted. Lubricating oils had slackened off a little, although prices held. Wax demand was fair, with prices firm. Fuel and gas oils were without change. The market for petroleum was slightly easier on snow white and lily white qualities, but remained firm on the other grades.

Tankwagon Markets

There were no general changes in the tankwagon price basis noted during the week.

CHICAGO, Sept. 13.—The Wisconsin State Department of Markets reports in a bulletin dated September 10 a list of 22 points in the State, where tankwagon or service station gasoline prices are more than ½c. per gallon below the normal posted market for those points. Principal points included in the bulletin as having cut prices include Milwaukee, Kenosha, Beloit, Janesville and Fond du Lac.

Market Conditions

Gasoline and Naphthas.—The market on export gasoline at the Gulf was ¼c. a gallon lower last week at 10c. for navy, 11¼c. for 60-62, 390 e. p., and 12c. for 64-66, 375 e. p. The local export situation was unchanged, with routine buying reported. The jobbing market at Bayonne continued held at 11¾c. per gallon, although there were some indications that this price was being shaded in some transactions. Demand was rather quiet. The tankwagon market held unchanged at 18c., a good demand ruling.

Kerosene.—The export market on prime white at the Gulf was up ⅛c. to 6⅞c. per gallon last week. With this exception, export quotations were unchanged both here and at the Gulf, with a good demand reported. The jobbing market at Bayonne continued firm at 8½c. a gallon for water white in tankcar lots. Refinery prices were stronger at other points. A good demand for tankwagon kerosene was reported, with the market in this territory continuing held at 15c. per gallon. Pennsylvania refiners were quoting 45 water white at 8c. a gallon, 46 at 8⅜c. to 8½c., and 47 at 8¾c. to 9c. per gallon, these quotations being the high point for the year thus far.

Fuel and Gas Oils.—Heavier consumption of bunker "C" fuel oil was reported during the past week, with the market holding unchanged at $1.05 per barrel, f.o.b. New York and New Jersey refinery terminals, bulk. Demand for fuel oil for furnace consumption was expected to pick up materially within the next few weeks. Diesel oil sales were showing expansion, the market ruling firm at $2 a barrel, bulk, at Bayonne. Gas oil sales were also reported picking up, with refiners quoting 32-36 oil at 5¼c. per gallon, bulk, at local refineries.

Paraffin Wax.—A strong market continued in evidence last week, although no further advances materialized. Domestic consumers were reported to have covered more liberally on their immediate needs, and buying had fallen off a little. Export inquiry had also shown some recession. Refiners' price views remained steady, however, and offerings were not of large volume.

Petrolatum.—Spot sellers were offering snow white at 8c. to 8¼c. per pound, carlots, and lily white at 7½c. to 8c., these quotations being respectively ¼c. and ½c. under the previously quoted market. A strong market prevailed on other grades. Demand was reported to be showing improvement, with a good volume of business on prompt shipment material.

Medicinal Oils.—Consuming manufacturers were in the market for supplies in moderate volume. There appeared to be no rush to cover, but an orderly buying movement was in progress. Quotations remained steady and unchanged on both the domestic and Russian oils.

Lubricating Oils.—Trading had slowed down on motor lubricating oil somewhat last week, but the market remained in steady position. Refiners continued to hold the market on a firm basis, although buyers in some instances were inclined to look for some price recessions, in view of the ending of the season of heaviest consumption. Pale and red oils were moving in moderate quantities, at unchanged prices. Export trade was quiet. The movement through the local market during the week of September 13 was as follows:

	Receipts Barrels.	Exports Gallons.
Friday	.....	21,250
Saturday	.....	81,300
Monday	.....	196,000
Tuesday	.....	139,550
Wednesday	.....	31,800
Thursday	.....	157,150
Totals	.....	627,050

Current Prices

(For late price changes, see page 2)

Gasoline and Naphtha

Gasoline, U.S. Motor, tankwagon	gal.	$0.18 @	—
Bayonne, tankcars	gal.	.11¾@	.12¼
Navy, 58-60, 437 e. p., N. Y.: export, bulk	gal.	.12 @	—
cases	gal.	.2690@	—
Naphtha, 61-63 deg., export, bulk	gal.	.13 @	—
64-66 deg., export, bulk	gal.	.13½@	—
66-68 deg., export, bulk	gal.	.16½@	—

Kerosene

Kerosene, tankwagon	gal.	.15 @	—
S.W., export, bulk	gal.	.07¾@	—
cases	gal.	.1740@	—
W. W. Bayonne, bulk	gal.	.08½@	—
export, bulk	gal.	.09 @	—
cases	gal.	.1865@	—

Fuel* and Gas Oils

Gas oil, Bayonne, 32-36 deg., bulk	gal.	.05¼@	—
†Diesel oil, Bayonne, bulk	bbl.	2.00 @	—
Furnace oil, delivered, 400 gals. or more, bulk	gal.	.10 @	—
50 to 399 gals., bulk	gal.	.10½@	—
Fuel oil, bulk, f.o.b. N. Y. and N. J. refinery terminals—			
Monday	bbl.	1.05 @	—
Tuesday	bbl.	1.05 @	—
Wednesday	bbl.	1.05 @	—
Thursday	bbl.	1.05 @	—
Friday	bbl.	1.05 @	—
Saturday	bbl.	1.05 @	—

* Lighterage charge, 5c. per barrel.
† Lighterage charge, 6.5c. per barrel.

Lubricating Oil

(Car lots, in barrels)

Cylinder, filt., D 600	gal.	.32¼@	.33
E 600	gal.	.26 @	.27
Unfiltered, 600 s. r.	gal.	.19½@	.20
650 s. r.	gal.	.22½@	.23
600 flash, s. r.	gal.	.25½@	.26
650 flash, s. r.	gal.	.34½@	.35
Bright stock, light	gal.	.44 @	.46

Motor, 600, No. 6 color	gal.	.35½@ .36
500, No. 7 color	gal.	.33½@ .34
400, No. 6½ color	gal.	.31½@ .32
300, No. 6 color	gal.	.30½@ .31
200, No. 8¾ color	gal.	.24½@ .25
Pale, 100 vis., No. 2¼, color	gal.	.13 @ —
180 vis., No. 3¼ color	gal.	.20 @ .20¼
230 vis., No. 3¾ color	gal.	.24 @ .24½
Red, 200 vis., No. 6 color	gal.	.16½@ .17
250 vis., No. 6 color	gal.	.17½@ .18
300 vis., No. 6¼ color	gal.	.18¾@ .19

Paraffin Wax

Crude, white, scale—		
122@124 A.m.p., bags	lb.	.05¼@ .05¾
124@126 A.m.p., bags	lb.	.05¾@ .05½
yellow, scale, 124@126 A.m.p., bags	lb.	.05 @ .05¼
Match, 105@108 A.m.p., bags	lb.	.05½@ .05⅝
111@115 A.m.p., bags	lb.	.05¾@ .05⅞
†Fully refined, slabs, 118@120 A.m.p., bags	lb.	.05½@ .05¾
123@125 A.m.p., bags	lb.	.05⅝@ .05⅞
125@127 A.m.p., bags	lb.	.05⅞@ .06
128@130 A.m.p., bags	lb.	.06⅛@ .06¼
130@132 A.m.p., bags	lb.	.06¾@ .06⅞
133@135 A.m.p., bags	lb.	.07⅛@ .07⅜
135@137 A.m.p., bags	lb.	.07¾@ —
Semi-refined, solid, bags, 122@124 A.m.p., bags	lb.	.05⅝@ .05½

† For fully refined, in cases, add ¼c. per lb.

White Medicinal Oil

Domestic, 890@895 s. g.	gal.	1.00 @ 1.05
875@880 s. g., drums	gal.	.75 @ .80
865@870 s. g., drums	gal.	.70 @ .75
Russian, 860@865 s. g., 80-85 vis., drums	gal.	.70 @ .75
870@875 s. g., 150-155 vis., drums	gal.	.75 @ .80
875@880 s. g., 180-185 vis., drums	gal.	.80 @ .85
885@890 s. g., 325-330 vis., drums	gal.	.85 @ .90

Petrolatum

(Car lots)

Cream, barrels	lb.	.06½@ .06¾
Amber, dark, barrels	lb.	.03½@ .03⅝
light, barrels	lb.	.03¾@ .04
Dark green, barrels	lb.	.02 @ .02½
Lily white, barrels	lb.	.07½@ .08
Snow white, barrels	lb.	.08 @ .08¼
Veterinary, barrels	lb.	.03 @ .03½

Prices at Refineries

(Bulk, tankcar lots)

Gasoline and Naphtha

North Texas

48-50, 450 end point, naphtha	gal.	.09 @ .09¼
50-52, 450 end point, naphtha	gal.	.09 @ .09¼
56-58, 450 end point, naphtha	gal.	.09¼@ —
58-60, 437 end point, 140 i.b.p., (U. S. Motor)	gal.	.09¼@ .09¼
60-62, 450 end point, gasoline	gal.	.09⅝@ .09⅜
64-66, 390 end point, gasoline	gal.	.10 @ .10⅛
64-66, 375 end point, gasoline	gal.	.10⅛@ .10¼
68-70, 360 end point, gasoline	gal.	.10⅜@ .11
68-70, 350 end point, gasoline	gal.	.10⅜@ .11
Grade A, 68-70, 375 e.p.	gal.	.08¾@ .09
Grade B, 76-82, 375 e.p.	gal.	.08½@ .08⅝
Grade C, 86-88, 350 e.p.	gal.	.08½@ .08⅝

Oklahoma

50-52, 450 end point	gal.	.09 @ .09¼
56-58, 450 end point	gal.	.09 @ .09¼
58-60, 450 end point	gal.	.09 @ .09¼
58-60 (U. S. Motor), 437 end point, i.b.p., 140	gal.	.09¼@ .09½
60-62, 400 end point	gal.	.09⅝@ .09⅞
64-66, 390 end point	gal.	.10¼@ .10¼
64-66, 375 end point	gal.	.10⅜@ .10⅜
68-70, 360 end point	gal.	.10⅜@ .11
68-70, 350 end point	gal.	.10⅜@ .11
Grade A, 72-78, under 375 end point	gal.	.08¾@ .09

Oklahoma (Cont'd)

Grade AA, 80-87.9, 99% recovery,	gal.	.08¾@ .09
Grade B, 76-82, 375 e.p.	gal.	.08½@ .08¾
Grade BB, 84-92, 85% recovery,	gal.	.08½@ .08¾
Grade C, 80-88, 350 e.p.	gal.	.08½@ .08¾

Pennsylvania

52 grav., naphtha	gal.	.11½@ .11⅝
54 grav., naphtha	gal.	.11½@ .11⅝
56 grav., naphtha	gal.	.11½@ .11⅝
58 grav., naphtha	gal.	.12 @ .12¼
60 grav., gasoline	gal.	.12½@ .12⅝
62 grav., gasoline	gal.	.13 @ —

North Louisiana-South Arkansas

58-60, 450 end point	gal.	.10 @ .10¼
58-60, 437 end point (U.S. Motor),	gal.	.10¼@ .10½
64-66, 375 end point	gal.	.11 @ .11¼

Gulf Coast (Export)

Navy, bulk	gal.	.10 @ —
60-62, 390 e.p.	gal.	.11¼@ —
64-66, 375 e.p.	gal.	.12 @ —

California

56-58, 375 end point	gal.	.09 @ .09½

Kerosene

Gulf Ports (Export)

Prime white, bulk	gal.	.06⅞@ —
Water white, bulk	gal.	.07⅛@ —

North Texas

41-43 water white	gal.	.06¼@ .06¼
42-44 water white	gal.	.06⅜@ .07

Oklahoma

41-43 water white	gal.	.06¼@ .06⅜
42-44 water white	gal.	.06⅜@ .07

Pennsylvania

45 water white	gal.	.08 @ —
46 water white	gal.	.08⅜@ .08½
47 water white	gal.	.08⅝@ .09

North Louisiana-South Arkansas

41-43 water white kerosene	gal.	.06⅞@ .07

Fuel and Gas Oils

Pennsylvania

30-34 fuel oil	gal.	.04¾@ .05
36-40 fuel oil	gal.	.04¾@ .05

Oklahoma

14-16 fuel oil	bbl.	.55 @ .57½
18-22 fuel oil	bbl.	.57½@ .60
22-26 fuel oil	bbl.	.60 @ .62½
24-26 fuel oil	bbl.	.62½@ .65
26-30 fuel oil	bbl.	.70 @ .72½
28-30 fuel oil	bbl.	.80 @ .82½
32-36 gas oil	gal.	.02⅝@ .02½
36-38 distillate	gal.	.02¾@ .03
35-37 distillate	gal.	.02¾@ .03
38-40 distillate	gal.	.03 @ .03¼

Kansas

24-26 fuel oil	bbl.	.70 @ .75
32-36 gas oil	gal.	.02½@ .02⅝
38-40 distillate	gal.	.03⅛@ .03¼

North Texas

32-36 gas oil	gal.	.02¼@ .02⅝
24-26 fuel oil	bbl.	.60 @ .62½
26-30 fuel oil	bbl.	.60 @ .62½

Gulf Coast (South Texas)

Gas oil	gal.	.03⅞@ .04
Fuel oil	bbl.	.90 @ 1.00

Louisiana-Arkansas

32-36 gas oil	gal.	.02½@ .02¾
18-20 fuel oil	bbl.	.60 @ .65
16-20 fuel oil	bbl.	.60 @ .65
38-40 light straw	gal.	.03¼@ .03⅜

California

Fuel oil (at tidewater), bunkers	bbl.	.85 @ 1.00
Diesel oil, 27 plus	bbl.	1.15 @ 1.10

Lubricating Oils

Pennsylvania

150 vis., No. 3 color	gal.	.26 @ .26½
180 vis., No. 3 color	gal.	.29½@ .30
200 vis., No. 3 color	gal.	.31½@ .32
220 vis., No. 3 color	gal.	.35 @ .35½
600 fire steam ref. cyl. stock	gal.	.13 @ .13½
625 fire steam ref. cyl. stock	gal.	.14 @ .14½
650 fire steam ref. cyl. stock	gal.	.15 @ .16½
600 E amber fil. cyl stock	gal.	.17 @ .17½
600 D cyl. stock	gal.	.23 @ .23½
600 cold test (bright filt)	gal.	.36½@ —
600 cold test (dark filt)	gal.	.34½@ —

Oklahoma

100 vis., No. 2 color	gal.	.05¼@ .06⅛
100 vis., No. 3 color	gal.	.05½@ .06
150 vis., No. 3 color	gal.	.08¾@ .08½
150 vis., No. 4 color	gal.	.08 @ .08¼
180 vis., No. 3 color	gal.	.09¾@ .10
180 vis., No. 4 color	gal.	.09½@ .09⅝
180 vis., No. 5 color	gal.	.09¼@ .09½
200 vis., No. 3 color	gal.	.10¾@ .11
200 vis., No. 4 color	gal.	.10½@ .10⅝
200 vis., No. 5 color	gal.	.10¼@ .10½
220 vis., No. 3 color	gal.	.12 @ .12⅛
220 vis., No. 4 color	gal.	.11 @ .11⅛
220 vis., No. 5 color	gal.	.10 @ .10½
240 vis., No. 3 color	gal.	.13⅝@ .14
240 vis., No. 4 color	gal.	.13½@ .13⅝
240 vis., No. 5 color	gal.	.13 @ .13¼
280 vis., No. 3 color	gal.	.15⅝@ .16
280 vis., No. 4 color	gal.	.15½@ .15⅝
280 vis., No. 5¼ color	gal.	.14¼@ .14½

South Texas

100 vis., No. 2 color, unfit.	gal.	.07 @ .07¾
200 vis., No. 3 color, unfit.	gal.	.10¼@ .10¾
500 vis., No. 3½ color, unfit.	gal.	.13¼@ .13¾
200 vis., No. 5 to 6 color, red oil	gal.	.08½@ .08¾
300 vis., No. 5 to 6 color, red oil	gal.	.09¼@ .09¾
500 vis., No. 5 to 6 color, red oil	gal.	.10¾@ .11¼
750 vis., No. 5 to 6 color, red oil	gal.	.13½@ .14

California

130 vis., 2½ to 3 color		.09 @ .10
200 vis., 2½ to 3 color		.10 @ .10½
300 vis., 3 to 3½ color		.10½@ .11
350 vis., 3½ to 4 color		.11 @ .12
400 vis., 3½ to 4 color		.13 @ .13½
200 vis., 4½ to 5 color		.08½@ .09
300 vis., 5 to 6 color		.09 @ .09½
400 vis., 5 to 6 color		.11 @ .11½
500 vis., 4½ to 5 color		.11¼@ .12
500 vis., 6 to 6½ color		.11 @ .11½
600 vis., 6½ plus color		.12 @ .12½

Paraffin Waxes

(Bags, car lots)

Pennsylvania

122-124 white, crude, scale	lb.	.05 @ .05¼
124-126 white, crude, scale	lb.	.05¼@ .05½
126-128 white, crude, scale	lb.	.05½@ .05¾

Oklahoma

122-124 white, crude, scale	lb.	.04½@ .04¾
124-126 white, crude, scale	lb.	.04½@ .04¾

Chicago Petroleum Market

CHICAGO, Sept. 14, 1928.

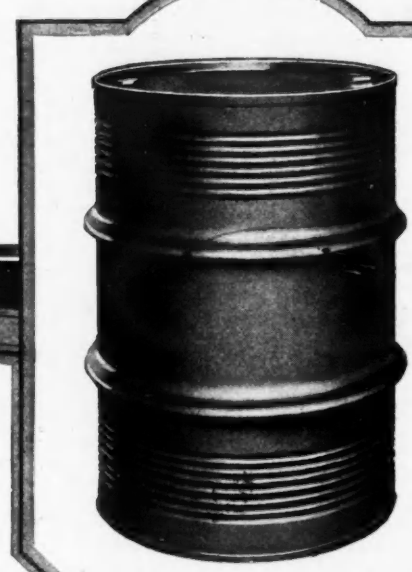
While demand for, and consumption of, gasoline is indicated to have continued at an exceptionally high rate, the tone of the spot tankcar gasoline market the past week has continued rather dull and bordering on easiness, although the basic Oklahoma market held unchanged, as far as most of the leading independent refiners' quotations were concerned.

Perhaps the best key to the market of the past days has been the fact that peak consumption was past, jobbers had laid in fairly large gasoline stocks, and that the latter were waiting before buying additionally for the rest of September to see if the gasoline market would break. No break has come, although there are some soft prices obtainable from some sellers. Thus it is a rather mixed market.

The fact that there is no distress gasoline on the market and that about the only gasoline southwestern refiners now have is made up of their working stocks has induced most refiners to hold prices. Some gasoline reaching the Chicago market is from north Texas and west Texas, where prices have been shaded, but best information would tend to indicate that this situation is fairly well in hand. Refiners say certain interests are trying to break the market. However, the base price on motor gasoline remains at 9¾c.

There is a good, strong market on tankcar kerosene, some refiners quoting as high as 6¾c.

Color— an aid to selling



The modern trend toward the use of containers of distinctive color, to more readily identify the manufacturer with his product and reflect his individuality, has met with a ready recognition in the P. I. W. Baked Enamel Process.

A wide range of color combinations is available to satisfy the particular fancy of the individual shipper.

The enamel used is specially prepared for the purpose and applied to the barrel by the means of high pressure sprays, so as to insure an even coating of close texture. The enamel is then thoroughly baked on in an automatic oven, heated to a pre-determined temperature.

The result is a barrel that is not only properly protected but is, at the same time, distinctive in appearance.

Write for prices and descriptive literature.

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I. C. C. AND LIGHT GAUGE DRUMS
G-E-M BILGED STEEL BARRELS
PENNSYLVANIA TANK CARS
STILLS—6 IN. THICK WALLS
OIL REFINING EQUIPMENT
PRESSURE VESSELS
VACUUM VESSELS
AGITATORS
CHEMICAL PROCESSING EQUIPMENT
OIL STORAGE TANKS UP TO 120,000 BARRELS CAPACITY
ELEVATED WATER TANKS
PRESSURE PIPE LINES
PENSTOCKS
AUTOCLAVES
KILNS
DRYERS
ANNEALING BOXES
RETORTS
DIGESTERS
SPHERICAL VESSELS
BLAST FURNACE EQUIPMENT
CREOSOTING CYLINDERS
GALVANIZING KETTLES
EXCHANGERS
SMOKESTACKS
GENERAL STEEL PLATE CONSTRUCTION

Branch Plant: Beaumont, Texas

P.I.W. STEEL BARRELS

THE PETROLEUM IRON WORKS COMPANY

NEW YORK CHICAGO SHARON, PA. HOUSTON TULSA

on 41-43 grade, but the average ruling price apparently being nearer 6½c. Farmers have bought good quantities of the product and are using it in volume. Likewise there is interest in distillates which is expected to intensify as the season comes on. Distillate prices are ruling firm. The same applies to gas oil, especially the better grades (there is some easiness in ordinary gas oil). Higher prices are being predicted for most of these products and also high grade fuel with the coming of cool weather.

Fuel oil is marking time as far as the market price situation of the more ordinary materials is concerned, but the good refinery fuels are coming into a nice demand. Some sellers have advanced their prices on better fuels 2½c. a barrel. Others have stopped shading prices and are holding firm. There is less fuel than formerly offered. There is virtually no fuel urgently seeking outlet, and this includes west Texas sulphur oil as well as refinery product. A strengthening of the fuel market might possibly have some reflection in the gasoline market, some believe.

Ruling quotations were:—

GASOLINE (cents per gallon)—50-52, 450 (naphtha), 9¼c. to 9⅝c.; 56-58, 450, 9¼c.; 58-60, 437 (U. S. motor), 9⅝c. to 9¾c.; 60-62, 400, 10c. to 10¼c.; 64-66, 390, 10⅜c. to 10⅝c.; 64-66, 375, 11c. to 11⅛c.; 68-70, 360, 11⅛c. to 11½c.

KEROSENE (cents per gallon)—41-43, water white, 6½c.; 42-44, water white, 7c. to 7⅛c.

FURNACE OIL (cents per gallon)—38-40, straw, 3¼c. to 3¾c.; 36-38, straw, 3c.; 32-34, straw, 2⅝c. to 3c.; 32-36, zero gas oil, 2⅜c. to 2⅝c.; 32-36, dark industrial gas oil, 2½c. to 2⅝c.

FUEL OIL (cents per barrel)—28-30, zero, 85c. to 87½c.; 26-28, 70c. to 80c.; 24-26, 65c. to 67½c.; 18-22, zero or low sulphur, 62½c. to 65c.; 18-22, sulphur, 52½c. to 57½c.; Smackover, treated, 82½c.

LUBRICATING OIL—The lubricating oil situation is improving, with several southwestern refiners advancing bright stocks 1 cent to 26 cents a gallon. Trade demand for various lubricants is good.

New Orleans Petroleum Market

NEW ORLEANS, Sept. 14, 1928.

The market for 58-60 U. S. gasoline is fair. Prices in tank cars, at refinery, range from 10⅝c. to 10½c. a gallon. Delivered to local dealers, freight, taxes and inspection included, the quotation is 13¾c. per gallon.

Inquiry for 41-43 water-white kerosene is good. Sales are fair.

Refineries offer this grade at 7½c. to 7⅝c. a gallon. The delivered price, including freight, taxes and inspection, is 10¼c. a gallon.

There is a fair demand for Bunker C fuel oil at 95c. to $1.05 a barrel, alongside, delivered in the harbor.

Tulsa Petroleum Market

TULSA, Sept. 12, 1928.

There was a more cheerful tone throughout the Midcontinent area during the week insofar as the refinery gasolines were concerned, because of the knowledge that stocks were relatively low, coupled with increased buying for immediate shipment to northern destinations.

The U. S. Motor material generally ruled higher in price, due to improved conditions in the north Texas district, from which area the lower quotations originated during the previous week. There was a rather wide range in quotations on this material, due to a few of the smaller units who do not have sufficient storage or financial backing to carry stocks, selling on the day-to-day market at 9¼c. to 9¼c. a gallon, while the larger concerns were passing up this business and maintaining the higher levels of 9⅝c. to 9¾c. a gallon.

The export situation was practically unchanged from last week, and high-test prices are barely holding their own. However, there was a better demand for these grades for domestic shipment than usual, especially for the 68-70, 360 e. p., for northern destinations.

Natural gasolines had the appearance of becoming more stabilized after sinking more than 2½c. a gallon from their peak, in face of the fact that buying continues to be confined to small lots for immediate shipment.

Kerosenes were generally steady around peak prices, but there appears to be a tapering off in buying for the present, especially for deferred shipments. Stocks are comparatively low and buying seems to be about on an even keel with production.

Distillates ruled steady at the previous week's levels, with a fair demand from northern tank-wagon distributors, especially for the low sulphur, flash and cold test materials.

Gas oils were generally unchanged in price, with only a fair demand coming from industrial concerns. The demand for cracking purposes is slowing up somewhat, as the end of heavy gasoline consumption draws near.

A little more interest was shown in fuel oils during the week, although prices were generally unchanged. There seems to be a tendency on the part of the larger buyers to await the result of the lower freight rates to be established from the Pyote, Texas, district, before buying their winter requirements.

Ruling prices in the Midcontinent, basis group 3 Oklahoma, are approximately as follows:—

REFINERY GASOLINES.—The 56-58, 450 e. p., 8¾c. to 9c.; a gallon; 58-60, 437 e. p., U. S. Motor, 9¼c. to 9⅝c.; 60-62, 400 e. p., 9⅝c. to 9⅞c.; 64-66, 390 e. p., 10⅛c. to 10¼c.; 64-66, 375 e. p., 10¼c. to 10⅜c.; 68-70, 360 e. p., 10⅜c. to 11c.

NATURAL GASOLINES.—Grades A and AA, 8⅝c. to 9c. a gallon; grades B, BB and C, 8½c. to 8⅝c. a gallon.

KEROSENES.—The 41-43 gravity, doctor test material, 6¼c. to 6½c. a gallon; 42-44 gravity, 7c. to 7¼c. a gallon.

DISTILLATES.—The 36-38 gravity, light straw color, 2⅞c. to 3c. a gallon; 38-40 gravity, light straw color, zero cold test, flash 18 deg. or better, 3c. to 3¼c. a gallon.

GAS OILS.—Ordinary 32-36 industrial grades, 2⅜c. to 2½c. a gallon; 32-36 gravity, light straw color, zero cold test, under ½ of 1 percent sulphur, flash 18 deg. or lower, 2⅜c. to 2⅝c. a gallon.

FUEL OILS.—The 18-22 gravity, high sulphur content, 50c. to 55c. a barrel; 18-22 gravity, low sulphur, 55c. to 57½c.; 22-26, 60c.; 24-26, 62½c.; 26-30, 67½c.; 28-30, 80c. to 85c.; 30-32, 90c. to 95c. a barrel.

LUBRICATING OILS AND WAXES.—Lubricating oils are generally unchanged in price. Bright stocks appear to be somewhat scarce. Waxes ruled strong at 5c. a pound for 124-126 white scale, packed in sacks or barrels, f.o.b. refineries.

Ohio Oil Jobbers Meet

What may prove to be the first step in a far-flung co-operative movement on the part of oil companies all over the country to make the motoring public more lubrication-conscious was taken at the convention of the Ohio Petroleum Marketers' Association at Toledo, September 5 to 7.

Ohio's "lubrication week" will be put over in complete and convincing style if the vote of the several hundred oil marketers attending the meeting is an indication. It was voted unanimously to follow out plans for a state-wide campaign of education and demonstration to motorists for the week of October 20 to 27.

Not only will there be a campaign for the benefit of the public, but also much attention will be paid to the education of service station operators and their station salesmen on the subject of lubrication, according to plans outlined at the meeting by W. A. Milne, secretary, and other speakers.

Teagle Discusses World Curb on Oil Production

Walter C. Teagle, president of the Standard Oil Company of New Jersey, who returned September 13 on the 'Berengaria" from conferences with oil men in England, on his arrival issued a statement which follows in part:—

A better understanding of the world oil problem is in prospect. While all conversations in England revealed a unanimity of view that the uneconomic production of crude oil the world over is injurious to the entire petroleum industry, and in the end would adversely affect the consumers, it is manifest that the specific undertakings on the part of the large petroleum interests to correct this situation are impracticable.

Any attempt at regulation of the overproduction of crude oil would obviously require the co-operation of a vastly greater number and diversity of interests than were represented at the conferences.

The one result of my talks with Sir Henri Deterding and Sir John Cadman was a clearer understanding on the part of us all of the desirability of action throughout the crude production industry to regulate its output to conform more closely to the requirements of the consuming markets.

This, of course, can only be accomplished by voluntary, but more or less concerted, action on the part of large and small producers in all the important fields of the world and by the postponement of the opening of new fields until the present period of overproduction has definitely passed. In other words, the industry's future prosperity depends very largely upon measures similar to those inaugurated with government co-operation in the Seminole field being voluntarily adopted by the majority of producers in other parts of the world.

While Seminole led this movement in the United States, it was pointed out by representatives of the foreign companies that production from fields controlled by them has been shut in, and therefore co-operation with economic action being taken in the United States was already in evidence.

Denver Oil Bowlers

Denver oil teams in recent bowling contests rolled the following scores:—

In the Rocky Mountain League, September 5, Cities Service Oil, 2,392; Woodmen of the World, 2,317.

In the Major League, September 5, Public Service Company of Colorado, 2,681; Edelweiss Cafe, 2,598.

In the Greater Denver League, September 5, Robar Oil, 2,606; Denver Academy of Dancing, 2,792.

Plans are being made for consolidation of three Pennsylvania manufacturers of oil field machinery into a new company having assets of about $10,000,000. They are the Titusville Iron Works Company, Titusville Forge Company and Struthers Wells Company.

The Italo Petroleum Corporation September 1 opened twenty-eight filling stations in Los Angeles and it is expected that by September 15 it will have sixty of its own stations, and one hundred and eight more that are using its products.

The new oil jetty at Salt End, Hull, England, is now complete. It is 1,900 feet long. Salt End's capacity for discharging oil cargoes has been doubled by the erection of the new jetty, and nearly 700,000 tons of oil a year can now be received there.

A Russian oil trust to develop the Soviet oil holdings on the Island of Sakhalin is planned. Russia owns alternate squares in the oil territory and the Japanese company owning the other squares produced 600,000 barrels of crude petroleum in 1927.

Construction of the United Producers Pipe line from the Yates oil pool in Pecos County, west Texas, to Texas City, will start soon. The right of way will follow the originally obtained survey through Sutton, Crackett, Kimble, Gillespie and thence to the coast.

The Snow Cap oil refinery at Sunburst, Mont., which has been shut down for a few months because of insufficient crude oil, resumed operations September 1. It has a daily capacity of 500 barrels and is now assured of enough oil to keep it going indefinitely.

The Central Oil Company, Des Moines, Iowa, has leased the oil storage plant of the Keosauqua Oil Service Company at 825 South Seventh street, Des Moines. The Keosauqua company recently leased two of its retail stations to the Standard Oil Company of Indiana.

Petroleum imports at Havre, France, totaled 54,031 metric tons during the quarter ended June 30 as compared with 77,162 tons in the corresponding period of 1927. The United States share in the trade was 20,830 tons in the 1928 quarter against 28,735 tons in the 1927 quarter.

The Pure Oil Company, Chicago, has transferred Carl Egner from Tulsa, O., to El Dorado, where he will make emergency purchases for the company in connection with its Arkansas division. Pure Oil has recently been quite active in that territory in connection with the development at Champagnolle, Ark., and a new wildcat pool opened near the Mississippi River to the south.

The August issue of "Lubrication," published by the Texas Company, contains articles on motor transport equipment and heavy duty engine lubrication.

Suit has been filed in the district court at Craig, Colo., by the Iles Investment Company against the Yarg Producing & Refining Company and the Shaffer Oil & Refining Company to determine the rightful claim to 3,300 acres of oil lands on the Iles dome, Moffat county, Colo.

The Italo Petroleum Corporation of America has purchase properties of the Commercial Oil Company and Concordia Oil Company, in Coalinga Field, of California. Acquisitions give Italo complete block of holdings in this field with 102 wells producing about 45,000 barrels gross monthly.

The Roxana Petroleum Corporation is rebuilding and modernizing the oil-cracking equipment at its East Chicago, Ind., refinery, which was erected two years ago. The refinery has a cracking capacity of 8,000 barrels daily and a straight refining capacity of about 20,000 barrels daily.

The Texas Company is completing the work of installing Holmes-Manley pressure stills at its refinery at Pryse, Ky., and is expected to put the enlarged and improved plant into operation early in September. This plant formerly was owned by the Great Southern Refining Company.

The Altitude Petroleum Company, Chicago and Tulsa, has contracted to market the output of the newly completed refinery of the Big Spring Refining Company, Big Spring, Texas, and is assigning 300 tank cars to move the products. The plant has a capacity of 5,000 barrels daily, but will be operated initially at 3,500 barrels.

Harry McCormick, formerly head of the Midland Petroleum Company, and more recently manager of tankcar sales of light petroleum products for Jas B. Berry's Sons Company, Chicago, has resigned and will enter the wholesale oil products distributing business for himself, with offices in the First National Bank building, Chicago.

W. C. Hughes, for two years secretary of the Michigan Oil Men's Association, has resigned and H. H. Ragle, president, has taken over active management of the association. W. A. Garvey, formerly with the George W. Tubbs Oil Company, and more recently in business under his own name in Chicago, has been appointed field secretary of the association.

The Independent Filling Station Owners Association of Chicago have drawn up and adopted an agreement incorporating a scale of prices, to be charged by members of the organization for greasing, washing and supplying other services to automobiles. The scale varies with the make and size of the car. The scale is being posted at the places of business of each member and plans are being made to enforce it rigidly. This action follows the breaking out of widespread price cutting on work of this kind. At some stations, greasing and cleaning of motor cars is done free on purchase of gasoline.

Manchuria Soya Bean Data

WASHINGTON, Sept. 13, 1928.

The soya bean crop of Manchuria is at present in promising condition and may be equal to, or slightly larger than, last year's record crop if favorable conditions continue, according to a cable to the foreign service of the Bureau of Agricultural Economics from Agricultural Commissioner Paul O. Nyhus. In general, rainfall in Manchuria has been more than ample, and dry weather is needed in September to insure good yields and high quality. The acreage planted to soya beans in North Manchuria is above that of last year.

The chief United States interest usually lies in the soya bean oil market, but according to Mr. Nyhus the two companies in Manchuria, which manufacture plate cake, report that there has been strong demand for plate cake on the Pacific Coast of the United States where it is used for livestock feeding.

The wholesale price of soya beans at Harbin August 15 for October delivery was 95 cents United States currency per bushel of 60 pounds. Harbin prices for earlier years are not available for comparison. The average price of soya beans at Dairen for July, 1927, was $1.19 per bushel, while in August, 1926 and 1925, the price per bushel averaged $1.10 and 82 cents, respectively. The Dairen price would probably include cost of shipment from other centers, such as Harbin, as large quantities of beans are sent from Harbin to Dairen for shipment.

It is reported that Europe is showing a strong early interest in contracts for the new bean crop. Exports of beans from Manchuria for the nine months' period ending June 30 show a gain of 5 percent in total bean products compared to the corresponding period a year ago. Bean cake shipments fell off 25 percent, due to the curtailment in Japanese takings, but bean shipments gained 45 percent with the increased demand for beans by the European market.

The Pan Amercan Molasses Company has been organized jointly by Penick & Ford, and the American Molasses Company. C. W. Taussig, president of the latter firm, is president of the new corporation, which has plants in Cuba and the West Indies.

Gasoline Discount Form Is Revised in Central States

CHICAGO, Sept. 12, 1928.

The Standard Oil Company of California and other leading petroleum distributors in the central states are preparing to offer to their customers, October 1, a new quantity discount agreement. The form of the agreement is as follows:—

This agreement, made at —— this ——, 192—, by and between ——, party of the first part, hereinafter styled seller, and —— of ——, party of the second part, hereinafter styled buyer, witnesseth:—

That the seller agrees to sell and deliver, by and through its tank wagons or trucks, and the buyer agrees to purchase and receive at his place of business at —— gasoline, from ——, 192—, until ——, 192—, inclusive, and the buyer agrees to pay for same at the prevailing tank wagon market of the seller at —— on the date of delivery.

In consideration of this agreement in case the total deliveries to one buyer shall amount to the quantities as shown below during any one calendar month, said buyer shall be entitled to discounts as follows:—

Discounts

Over 500 gallons per calendar month, 2 cents per gallon.

Over 2,000 gallons per calendar month, 2½ cents per gallon.

Over 6,000 gallons per calendar month, 3 cents per gallon.

Said discounts shall be off the service station price of the seller at —— on date of delivery, which on this date is 2 cents (2c.) per gallon higher than the tank wagon price of the seller at ——, and will be paid or credited not later than the fifteenth (15th) of the month following. In computing discounts the difference between the tank wagon price charged at time of delivery and the service station price of the seller on that date shall be deducted from the total discount to be paid under this contract as discount already allowed.

If at any time the differential between the seller's tank wagon market and its service station market at —— should be changed, the seller will notify the buyer by registered mail.

To entitle buyer to discount the sales tickets or invoices furnished by the seller at the time of delivery must be sent to the seller not later than the 10th of the following month and the discount shall be figured therefrom.

In computing the quantity of gasoline under this contract there shall be included all special grades of motor gasoline purchased by buyer on orders accepted by seller.

Seller is not obligated under this contract to sell and deliver in excess of —— gallons per year.

Deliveries subject to delays resulting from fires, differences with workmen or from any other cause or causes beyond its control.

This contract is personal with the buyer and may not be assigned without the consent of the seller.

This contract may be cancelled by seller at the end of any calendar month on ten days' previous written notice to buyer.

Financial Notes

RICHFIELD OIL COMPANY directors have extended the time for deposits of Pan-American stock sixty days, until November 11, when the present offer of three shares of Pan American B for one share of Richfield expires. In the event of Pan-American winning the $5,000,000 suit brought against it by the government, stockholders of that company will receive one share of Richfield for each two shares of Pan-American.

GRASSELLI CHEMICAL COMPANY and subsidiaries' statment for the six months ended June 30, 1928, submitted to the New York Stock Exchange, shows net profit of $2,431,843 after interest, depreciation, Federal taxes and other deductions, equivalent after dividends on the percent preferred stock to $3.12 a share on 646,959 no par common shares outstanding at the end of the period. Consolidated income account for the six months ended June 30, 1928, follows:—Net sales, $21,044,455; costs and expenses, $17,819,536; balance, $3,224,919; other income, $383,469; total income $3,608,388; interest, etc., $19,930; depreciation and obsolenscence, $825,000; Federal taxes, $331,615; net profit, $2,431,843; preferred dividends, $411,726; surplus, $2,020,117.

CONTAINER CORPORATION OF AMERICA reports for the six months ended June 30 consolidated net income of $716,345 after depreciation, interest and Federal taxes, equal after preferred dividends to $1.44 on 260,564 participating class "A" common shares and 51 cents on 508,289 class "B" common shares.

V. VIVAUDOU, INC., reports for the quarter ended June 30 net income of $125,460 after charges but before Federal taxes equal after dividends on the 7 percent cumulative preferred to 19 cents a share on 381,573 shares of common, as compared with $137,630, or 23 cents a share in the previous quarter and $275,014 or 60 cents a share in the June quarter last year. Net income for the first six months of 1928 was $263,090 or 43 cents a common share, against $780,323, or $1.86 a share in the first half last year.

Buyers Prefer

"O-P-D"

Market Information

because it is

Accurate

and

Definite

Miscellaneous Oils

Chicago Vegetable Oils

(Continued from page 35)

CHINAWOOD (sellers' tanks). — September-December, 13⅝c.; spot, barrels, less than car lots, Chicago, 13¾c.

SOYA BEAN (sellers' tanks).—Prompt shipment, Pacific coast, 9½c. to 9⅝c.; spot, barrels, car lots, Chicago, 11c.

PEANUT (sellers' tanks).—Basis prime crude, 9¾c.; edible, barrels, car lots, 12⅜c. to 13¼c.; barrels, less than car lots, 13⅜c.

San Francisco Vegetable Oils

SAN FRANCISCO, Sept. 10, 1928.

The vegetable oil market is quiet, and while prices are practically unchanged, competition in edible oils tends to lower levels. Wood oil is strong, but trading is still limited.

SOYA BEAN.—Crude soya bean oil, f.a.q., is quoted at 10¼c. per pound, f.o.b. San Francisco, for September shipment from the Orient. Barrels, 10¾c. per pound, duty paid, ex-dock San Francisco, for the same position. Refined and deodorized soya bean quoted nominally at 12c. per pound, c.i.f. Pacific Coast, in bond. Small intermittent inquiries are noted. There are no spot stocks on the Coast and nothing coming forward from the Orient.

CHINAWOOD.—Firmer, with a fair demand. September tankcars are quoted at 13⅝c. per pound, f.o.b. Pacific Coast, with October-November-December at 13½c. Hankow quotations are much higher.

PERILLA.—The situation is unchanged. Only limited stocks are available on the Coast and supplies are difficult to secure in the Orient. Tankcars sold during the week at 12½c. per pound, f.o.b. San Francisco.

RAPESEED. — The market remains steady with prices for futures higher. Refined oil is now quoted at 11c. per pound, in barrels, San Francisco. Blown rapeseed oil sold durng the week at 13¼c. per pound, duty paid, in barrels, San Francisco.

COCONUT.—Tankcars, 7¾c. per pound, f.o.b. Pacific Coast.

COPRA.—The market is weaker at 4¾c. per pound, with buyers bidding 4⅝c. for sun-dried copra, in bulk, San Francisco. The Mexican market is also weaker.

LUMBANG.—Nominally 9¾c. per pound, San Francisco, in drums.

TEA.—Sellers in the Orient are still unable to offer owing to lack of supplies. Nomnally quoted at 18c. per pound.

PEANUT. — Oriental, nominally 10c. per pound, c.i.f. Pacific Coast, in barrels.

Copra

A steady tone continued to prevail in domestic markets in the absence of any material change in conditions abroad. The market on the coast was reported as somewhat more active, with quotations maintained at 4¾c. to 4⅞c. per pound. Recent advices from Manila reported heavy arrivals.

Fatty Acids

Red Oil.—A somewhat better inquiry was noted, but aside from this the situation lacked new features of interest. The market retained a firm tone owing to the strength of raw materials.

Stearic Acid.—A firm tone continued to prevail in the market here. Basic material was stronger. A good demand was noted from local and outside buyers and the output is moving steadily into consuming channels.

Chicago Fatty Acids

CHICAGO, Sept. 14, 1928.

Easing off on the part of raw materials prices resulted in recessions in the ruling prices on vegetable oils acids here the past week. Buying was for the most part on a limited, restricted basis, which did not go far toward supporting a retreating market. Both corn oil and coconut oil acids declined ½c. to 1c. These grades bore the brunt of the principal decline. Stearic acid ended about unchanged, and red oils were unchanged to a trifle firmer on tallow acidless.

Ruling quotations were:—

FATTY ACIDS.—Corn oil, double distilled, tankcars, 8½c.; barrels, car lots, 9c.; barrels, less than car lots, 9½c.; coconut, tankcars, 11c.; barrels, car lots, 11½c.; barrels, less than car lots, 12¼c.; cottonseed, tankcars, 8¼c.; barrels, car lots, 9¼c.; barrels, less than car lots, 9½c.; settled cottonseed soap, 60-62 percent bass, 4½c., nominal; boiled down soap stock, 65 percent basis, 4½c.; barrels, 5c.; cottonseed foots, 50 percent basis, 2⅝c.

STEARIC ACID.—High grade double press, 12¼c.; triple press, 14½c.

RED OIL.—Saponified, 9½c. to 10c.; distilled, 9c. to 9½c.; tallow, acidless, 11c. to 11½c.

Fats and Greases

Grease.—The market had a firmer tone owing to the stronger position of other products. Consumers were not disposed to anticipate, but there was a fairly active inquiry.

Lard.—Demand for cash lard showed some improvement, much of the buying apparently being of a conservative character. Export trade was fair. The trend of prices was upward at times. The movement of live hogs in the West was moderate.

Stearin.—There was a somewhat better inquiry and the market was firmer, oleo being advanced ½c. per pound.

Tallow.—A stronger tone developed, with offerings from producers light. Consumers manifested more interest in the situation and sales were reported at an advance of ¼c. per pound for extra, f.o.b. works. The weekly auction in London was postponed.

Domestic Grease Receipts

Receipts at New York last week, in packages:—

	Lard.	Tallow.	Grease.
Saturday	10	.....	.....
Monday	4,415	.....	.....
Tuesday	12,245	.....	.....
Wednesday	5,366	.....	.....
Thursday	5,486	.....	.....
Friday	5,135	.....	.....
Totals	32,651	.....	.....
Since January 1—			
This year	2,069,544	550	10,213
Last year	2,904,130	400	16,030

Grease Exports

Exports from New York during the week ended September 13 included the following:—

	Pounds			
	Lard.	Stearin.	Tallow.	Grease
Friday	30,800	.....	.....	.....
Saturday	229,600	.....	.....	36,000
Monday	1,985,225	91,600	.....	382,400
Tuesday	1,023,470	.....	.....	.....
Wednesday	201,600	.....	.....	.....
Thursday	175,000	.....	.....	.....
Totals	3,645,695	91,600	.....	418,400
Prev. week	4,012,913	.....	.....	114,000
Last year	6,606,711	.....	.....	1,229,000
Since Jan. 1—				
This yr.	218,507,467	703,600	317,312	21,538,920
Last yr.	284,648,886	318,000	208,000	36,464,600

Chicago Lard and Tallow

CHICAGO, Sept. 14, 1928.

The Chicago cash lard market held firm, with a good tone, a moderate volume of business and ruling prices well maintained at or near the high prices of the preceding week. The domestic business furnished most of the dealings, foreign buying being small. Tallow, however, saw marked price advances and a stronger tone throughout practically all the grades, with increases in quotations of ¼c. to ½c. Greases were not so consistent, but there were several strong spots, such as pigs' foot. However, there was a much stronger tone in the stearins, and prices advanced ½c. to 1¼c. on some grades, and even on the grease stearins prices were stronger.

The range of quotations from the opening on Saturday, September 8, to the close on Friday, September 14, is shown in the following table:—

	Per 100 pounds				
	Open.	High.	Low.	Close.	Previous Friday.
Cash	$12.80	$12.80	$12.80	$12.80	$12.80
Dec.	12.77	13.10	12.65	13.02	13.07
Jan.	13.07	13.30	12.90	13.17	13.25

Other quotations were:—

TALLOW (per pound, tierces).—Edible, 9¾c. to 10c.; fancy, 9¼c.; prime packers', 8¾c. to 9c.; No. 1 packers', 8⅜c. to 8½c.; No. 2 packers', 7¼c. to 7½c.; No. 1 renderers', 8¼c. to 8⅜c.; prime country, 8½c. to 8⅝c.; No. 1 country, 8¼c. to 8½c.; No. 2 country, 7c. to 7¼c.; B country, 7⅜c.

GREASE (per pound, tierces, unless stated).—Pigs' foot, 9¼c. to 9⅜c.; choice white, loose, 9¼c. to 9½c.; export choice white, 10⅛c. to 10¼c.; A white, 8¼c. to 8⅜c.; B white, 8c. to 8¼c.; crackling, 7⅜c. to 7⅝c.; yellow, 7⅝c. to 8c.; house, 7⅜c. to 7¾c.; brown, 7⅜c. to 7½c.; bone naphtha, 6½c. to 6⅝.

STEARIN (per pound, barrels).—Prime oleo, 12c. to 12⅛c.; lard, 15½c. to 16c.; A white grease, 8¾c.; export A white, 9⅜c.; yellow grease, 8¼c.; extra oleo stocks, 13c. to 13¼c.; No. 2 oleo stocks, 12c. to 12⅛c.

Liverpool Lard and Tallow

Quotations per cwt. on refined American lard in Liverpool last week were as follows:—

	Spot.	Sept.	Oct.	Jan.
	s. d.	s. d.	s. d.	s. d.
Saturday	67 3	67 3	68 0	68 0
Monday	67 6	67 3	67 9	67 9
Tuesday	67 9	67 6	68 0	67 9
Wednesday	67 9	67 9	68 3	67 9
Thursday	67 9	67 9	68 3	67 9
Friday	68 0	67 10½	68 6	68 0

Quotations per cwt. on Australian tallow in Liverpool last week were as follows:—

	Choice.	Fine, good mixed.
	s. d.	s. d.
Saturday	43 6	41 0
Monday	43 6	41 0
Tuesday	43 6	41 0
Wednesday	43 6	41 0
Thursday	43 6	41 0
Friday	43 6	41 0

Animal Oils

Degras.—The market was fairly steady, previous quotations on domestic and refined generally being repeated. Demand was moderate, with offerings generally light.

Lard.—The market had a firmer tone owing to the stronger position of raw material. Prices were unchanged to 25c. per 100 pounds higher. A somewhat better inquiry was noted, though consumers were not inclined to anticipate.

Neatsfoot.—Demand for moderate quantities showed some improvement. Offerings on spot were generally light. The market was firm with prices unchanged to 25c. per 100 pounds higher.

Oleo.—The market was quieter, but there was no increase in offerings and the tone remained steady, previous quotations generally being maintained.

Tallow.—Owing to the strength of raw material the market was firmer with a fair demand.

Movement of Oleo Products

Oleo oil exports and oleo stock receipts at New York last week were:—

	Oleo oil. Exports. Barrels.	Oleo stock. Receipts by rail. Tierces.
Friday	230	200
Saturday	10	180
Monday	2,384	375
Tuesday	130	747
Wednesday	...	625
Thursday	425	...
Totals	3,179	2,127
Since January 1—		
This year	111,151	53,475
Last year	165,820	45,161

Fish Oils

Cod.—The local market continued to be characterized by a steady tone. There was no material change reported in conditions prevailing in the primary market. Offerings from shippers there were light and bullish reports continued to be heard regarding production and supplies. A fair demand was reported here.

Menhaden.—The local market for refined had a steady tone, but aside from this the situation lacked features of interest. New business was rather quiet owing to the easy position of competing product. Offerings, however, were generally light. The market for crude was steady. Weather conditions were more favorable for fishing.

Sperm.—The market retained a steady tone. There was little change in the character of business, demand being routine.

Whale.—The refined situation lacked new features of importance. Consumers were not inclined to purchase ahead but there was fair inquiry and the movement into consuming channels is apparently up to normal. The market was steady. Crude was quiet with quotations nominal.

Baltimore Fish Oils

BALTIMORE, Sept. 14, 1928.

The catch of menhaden, as reported by the factories down the Chesapeake Bay, during the latter portion of the week showed some improvement, though it was still much below the record for the same time last season. No important additions were made to the supplies of fish oil produced, and the quotations were fairly steady at 40 cents per gallon, delivered in Baltimore, which is the figure that has prevailed of late. The factories still have some orders taken in advance of the opening of the season on a when-and-if-made basis to fill, and are paying little attention to getting new business in view of the comparatively small hauls of fish.

Chicago Fish Oils

CHICAGO, Sept. 14, 1928.

Fair sized movement in several grades of fish oils is reported by sellers in the Chicago market, with the west coast oils going out in moderate volume. Prices have been tending a bit easier, but sellers report they are able to do practically all their business on west coast oils above 40c. Some tankcar business has been done the last few days. Ruling quotations follow:—Cod, domestic, spot, barrels, 68c. to 70c.; Newfoundland, spot, barrels, 70c. to 72c.; menhaden, pressed, spot, barrels, 68c. to 73c.; unpressed, spot, barrels, 63c. to 65c.; sardine, Pacific coast, sellers' tanks, 42½c. to 45c.; salmon, Pacific coast, sellers' tanks, 42½c. to 45c.

San Francisco Fish Oils

SAN FRANCISCO, Sept. 10, 1928.

SARDINE.—Nominally 7c. per pound, San Francisco.

SPERM. — Nominally 42c. per gallon, in drums, Pacific oCast.

WHALE.—No. 0 and No. 1, nominally 7¼c. per pound; No. 2, 6¾c. per pound, San Francisco, in bulk.

London Sperm Oil Prices

Quotations on sperm oil in London last week were:—

	Per cwt. s.	d.
Saturday	28	6
Monday	28	6
Tuesday	28	6
Wednesday	28	6
Thursday	28	6
Friday	28	6

Current Prices

(For late price changes, see page 2)

Animal Oils

Degras, common, domestic, barrels	lb.	.04½@	.06
English, barrels	lb.	.03 @	.05¼
German, barrels	lb.	.03¾@	.04
neutral, domestic, barrels	lb.	.07¾@	.08½
English, barrels	lb.	.08¼@	.09
German, barrels	lb.	.06½@	.07
Horse, barrels	lb.	.09½@	Nom.
Lard, No. 1, barrels	100 lbs.	11.50 @	—
No. 2, barrels	100 lbs.	11.25 @	—
extra, barrels	100 lbs.	12.75 @	—
No. 1, barrels	100 lbs.	12.50 @	—
winter, strained, barrels,	100 lbs.	13.25 @	—
prime, barrels	100 lbs.	16.25 @	—
Neatsfoot, cold pressed, barrels,	100 lbs.	18.50 @	—
extra, barrels	100 lbs.	12.75 @	—
No. 1, barrels	100 lbs.	12.00 @	—
pure, barrels	100 lbs.	15.25 @	—
Oleo, No. 1, barrels	100 lbs.	13.50 @	—
No. 2, barrels	100 lbs.	12.50 @	—
No. 3, barrels	100 lbs.	11.25 @	—
Tallow, acidless, barrels	100 lbs.	11.75 @	—

Fish Oils

Cod, Newfoundland, barrels	gal.	.66 @	.67
Herring, coast, tanks	gal.	.40	Nom.
Menhaden, crude, f.o.b. Baltimore, tanks	gal.	.40 @	—
refined, light pressed, barrels,	gal.	.60 @	.61
white, bleached, barrels	gal.	.65 @	.66
yellow, bleached, barrels	gal.	.62 @	.63
Salmon, coast, tanks	gal.	.44	Nom.
Sardine, coast, tanks	gal	.40	Nom.
Sperm, bleached, f.o.b. New Bedford, barrels	gal	.84 @	.86
natural, f.o.b. New Bedford, barrels	gal.	.78 @	.80
Whale, crude, No. 1, coast, tanks	lb.	.07¼	Nom.
No. 2, coast, tanks	lb.	.06¾	Nom.
refined, winter, bleached, barrels	gal.	.89 @	—
extra, barrels	gal.	.82 @	—
natural barrels	gal.	.78 @	—

Vegetable Oils

Castor (see Drugs and Fine Chemicals).			
Chinawood, barrels or drums	lb.	.15 @	—
September arrival	lb.	.14¾@	—
Coast, tanks, spot	lb.	.13¾@	—
September shipment from Coast	lb.	.13¾@	—
October	lb.	.13¾@	—
barrels or drums, 1c. per lb. over tankcar prices.			
Coconut, Ceylon grade, barrels,	lb.	.09¾@	—
Coast, tanks	lb.	.07¾@	.07¾
Cochin grade, barrels	lb.	.09¼	Nom.
Manila, barrels	lb.	.09¼@	—
tanks	lb.	.08¼@	.08¼
Coast, tanks	lb.	.07¾@	.07¾
Corn, crude, barrels	lb.	.10	Nom.
mills, tanks	lb.	.08 @	—
refined, barrels	lb.	.12	Nom.
Mustard, barrels	gal.	.90 @	—
Olive, denatured, barrel	gal.	1.35 @	1.50
edible, barrels	gal.	2.25 @	2.40
foots, green, barrels	lb.	.10¼@	—
Palm, Lagos, casks	lb.	.08½@	.08¾
shipment, casks	lb.	.07¾@	—
Niger, casks	lb.	.07¾@	—
shipment, casks	lb.	.07¼@	.07⅝
Palm, kernel, casks	lb.	.09½@	.09¾
Peanut, crude, barrels	lb.	.12	Nom.
mills, tanks	lb.	.09¼	Nom.
refined, deodorized, barrels	lb.	.13¼	Nom.
Perilla, barrels	lb.	.13½	Nom.
Poppy seed, barrels	gal.	1.70 @	—
Rapeseed, blown, barrels	gal.	1.04 @	1.05
refined, barrels	gal.	.84 @	.86
Sesame, refined, drums	lb.	.14¼@	—
Soya bean, blown, barrels	lb.	.13¼@	.13½
crude, barrels	lb.	.12¼@	.12½
shipment from Orient, coast, tanks	lb.	.09¼@	.09¾
Tea, coast, barrels	lb.	.18	Nom.
Vegetable tallow, coast, mats	lb.	.07¾	Nom.

Fatty Acids

Coconut oil, mills, tanks	lb.	.11	Nom.
Corn oil, mills, tanks	lb.	.08¾	Nom.
Cottonseed oil, mills, barrels	lb.	.08¾	Nom.
Oleic (see red oil).			
Red oil, distilled, barrels	lb.	.09¾@	.10¼
tanks	lb.	.09 @	—
saponified, barrels	lb.	.10 @	.10½
tanks	lb.	.09¼@	—
Stearic, double pressed, bags	lb.	.13 @	.13½
triple pressed, bags	lb.	.16 @	.16½

Fats and Greases

Grease, house, tierces	lb.	.07¾@	.07¾
white, tierces	lb.	.07¾@	.10½
yellow, tierces	lb.	.07⅝@	.07¾
Lard, city tierces	100 lbs.	13.00 @	—
compound, tierces	100 lbs.	11.75 @	12.00
Middle Western, tierces	100 lbs.	13.35 @	—
neutral, tierces	100 lbs.	14.50	Nom.
prime Western, tierces	100 lbs.	13.45 @	—
Stearin, oleo, barrels	lb.	.12¼@	.12⅜
Tallow, edible, barrels	lb.	.10 @	.10¼
extra, works, loose	lb.	.08¾@	—
special, works, loose	lb.	.08⅝@	—
Wool grease (see degras, Animal Oils).			

Candles

Candles, adamantine, 6s, 16 oz., 20-set cases	set.	.14½@	.15¾
40-set cases	set.	.14 @	.14½
paraffin, cs., 14 oz., case of 40 sets	set.	.10 @	.10¼
6s, 14 oz., case of six cartons containing 36 sets	set.	.11 @	.11¼
6s, 12 oz., 40-set, cases	set	.09 @	.09¾
6s, 12 oz., cases of six cartons containing 36 sets	set	.10 @	.10¾
patent ends	set.	.17¾@	.18
stearin, 6s, 16 oz., plain, cases,	set.	.16¾@	.17

Two New York Produce Exchange memberships sold last week at $17,300, an advance of $1,300 as compared with recent sales.

Werner G. Smith, president of the Werner G. Smith Company, chinawood oil importer, Cleveland, was in this city during the week of September 3.

The annual tournament of the New York Produce Exchange Golf Club will be held September 20 at the Wheatley Hills Golf Club, East Williston, L. I.

C. L. Chapman, sales manager for the Niles Steel Products Company, maker of oil and paint containers, Niles, Ohio, was in this city during the week of September 10.

The Chefoo peanut crop is estimated at 32,000 tons this year, a drop of 10 percent from 1927. Chefoo exported to the United States 2,330 tons of unshelled peanuts and 3,181 tons of shelled peanuts in the first half of 1928, compared with 808 tons and 1,449 tons in the first half of last year.

Miss Virginia Barnes and Richard Hugh Trask, son of Arthur C. Trask, Chicago, were married at Meadville, Pa., September 3. Mr. Trask recently became associated with E. F. Drew & Company, Boonton, N. J., as a chemist. Arthur C. Trask is a Chicago dealer in fish oils and related products.

The third division of the United States Customs Court has sustained protest 122,617 of A. Gusmer, Inc., New York, over the classification of stearin pitch made from cotton residue at 20 percent under paragraph 1,459 of the tariff and has ordered the product reclassified at 10 percent as waste under paragraph 1,457.

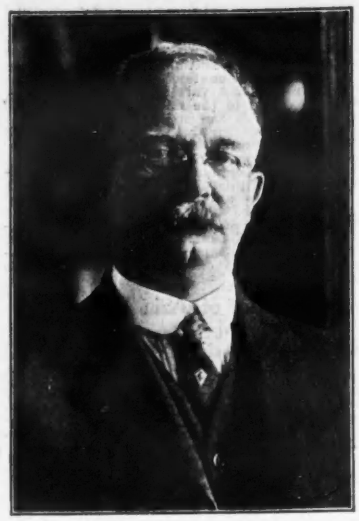
A Spanish royal order temporarily permits the importation up to 5,000 metric tons annually of peanut oil for use in the fish canning industry of Spain. Importation is to be permitted through the ports of Vigo, Coluna, Gijon, Santander and Huelve. The new order has been granted at the request of the fish canners of Galicia.

The record of insolvencies in the United States last week showed a total of 405 reported to R. G. Dun & Co., which is practically identical with the 406 failures a year ago. The week before, when the returns were for five business days only, owing to the Labor Day holiday, defaults numbered 321, while the aggregate for six days two weeks before was 389.

American Chemical Society Meeting

(Continued from page 17)

new members had been enrolled in the past year, bringing the total to 16,330. This, he said, makes the American Chemical Society the largest organization of its kind in the world. Dr. Parsons was re-elected to the office of secretary by the council.



Charles L. Parsons
Re-elected A. C. S. Secretary

G. J. Esselen, jr., was elected a member of the executive committee to succeed A. M. Comey.

The 1929 Spring meeting of the society will be held at Columbus, the Fall meeting at Minneapolis.

Nitrogen Economics

From the standpoint of the broad relations of chemistry and industry, the outstanding feature of the A. C. S. meeting was the economic symposium on nitrogen held Wednesday afternoon. This symposium was an innovation in A. C. S. programs, marking a trend, recently becoming quite pronounced, toward the cultivation of better mutual understanding between the chemist and the industrialist. The symposium was arranged by the division of industrial and engineering chemistry, the division of fertilizer chemstry rearranging its program to participate. Williams Haynes, of "Chemical Markets," presided during the reading of the papers contributed to the symposium, the speakers being executives of corporations engaged in the synthetic production of nitrogen compounds or their industrial utilization.

Economic Place of Nitrogen

Nitrogen is essential to the national defense, because of its usefulness as a carrier of oxygen in explosives, said Jasper E. Crane, president of Lazote, Inc., in a paper on "The New Place of Nitrogen in Chemical Economics." It is of fundamental importance with relation to the standard of living, because of its usefulness as a plant food. Its place in the economics of the nation is, therefore, well defined.

Enthusiasm aroused by statements asserting the possibility of an inadequate supply of nitrogen, have led to manufacturing projects that are economically unsound, said Mr. Crane. Desire to make some use of war plants has aggravated this condition, putting in operation plants that are too small or poorly located. Lack of accurate statistical data has had a part in the disappointment that faces many such undertakings.

Consumption of nitrogen in the United States has increased from some 300,000 tons in 1901, to 750,000 tons in 1913, 1,000,000 tons in 1924, and 1,600,000 tons in the fertilizer year ended June 30, 1928. If the properly calculated rate of increase is maintained, cosumption will reach 2,000,000 tons sometime between 1932 and 1936. Against this is a domestic productive capacity of 2,200,000 tons to be in operation in 1929. The threat of an over-supply is, therefore, clear. Although a greater rate of increase in consumption is likely, the rapid increase in the importation of synthetic compounds must not be overlooked.

By-product sulphate of ammonia now constitutes about 50 percent of domestic production of synthetic nitrogen compounds, Mr. Crane said, but the proportion represented by synthetic ammonia bids fair to reach 65 percent next year, 80 percent in 1930.

Prices of nitrogen compounds are decreasing, said the speaker, and are now, for sulphate of ammonia, only about two-thirds of the prewar scale. Production by fixation processes is the accepted way by which the supply can be increased and prices kept down. In the rapid progress of developments in the fixation field the arc process is passing out, the cyanamide process is at a standstill, but the progress in the synthesis of ammonia are too rapid.

Muscle Shoals as a source of nitrogen is an economic fallacy in Mr. Crane's opinion. The cyanamide process for which it is equipped could not be operated to produce material cheaply. Two cost factors stand out in the economic consideration of the synthesis of ammonia. One is that of producing the hydrogen; the other, that of combining it with the nitrogen. To get hydrogen from water with hydroelectric power is too costly in this country. It must be produced with cheap coal. Large plants are necessary for economy, and even with a large plant it is necessary to have cheap fuel, an advantageous location, skilled workmen, and ample capital. The result at best is a large volume of business at a small profit.

Cheap nitrogen is a fact, said Mr. Crane. The United States must become independent for its supply. The program now under way is a large one. But, going forward with confidence in the domestic manufacturing consumer, the nitrogen industry has a promising future.

Synthesis of Ammonia

Developments and modifications in the synthesis of ammonia were reviewed by E. M. Allen, president of the Mathieson Alkali Works. Few, he said, know the progress that has been made or the various paths which it has followed until, today, the far larger part of the ammonia supply is of synthetic production. This has been conducive to the rapid obsolesence of plants. Chemists are at fault in this, said Mr. Allen, because they do not pay enough attention to the commercial side of the problems of industry.

The position of ammonia as a market commodity has changed vastly, Mr. Allen said, with the shift in proportionate importance from its physical use as a refrigerant to its chemical use. But, the distribution practices of manufacturers have not kept step. Too many cylinders are required, at great expense to the shipper, to handle ammonia for refrigeration. Too little use is being made of tank-shipping facilities. The advantages of tankcars of capacities up to 50,000 pounds and of 1,000-pound containers were pointed out by the speaker.

Important in a general economic sense, the development of the synthesis of ammonia, said Mr. Allen, has been hard on the distillers of ammoniacal liquor. This, he said, indicated the importance of giving careful attention to depreciation and obolescence. Prices have been cut. High selling costs, running up to three times the cost of production, still prevail. A change is imperative.

With regard to the future supply of ammonia, Mr. Allen said that the output from ammoniacal liquor would remain steady at 30,000,000 to 35,000,000 pounds a year. Meanwhile, chemical uses are expanding rapidly in the production of sulphuric acid, soda ash, and nitric acid. The latter alone, he estimated, would reach 150,000,000 pounds a year. Explosives would require 70,000,000 pounds. The United States, he said, is secure in its position with respect to supplies. Plants existing and building will be sufficient to make the country independent, even in case of war. And no government assistance has been given toward this end. Muscle Shoals he called a chemical ghost, disinterred periodically for political purposes. As a power plant, it has possibilities only for general use. Coal power is far cheaper for the production of nitrogen. He held that it is not necessary even to keep the nitrate plant at Muscle Shoals in a stand-by condition for war.

Government money might better be spent in educating the farmer to use fertilizers, which are now cheap, than in trying to make cheap fertilizers. The largest use of synthetic ammonia will be in the manufacture of fertilizers, simple materials or composite products. Liquid anhydrous ammonia is now being used safely, practically, and economically. The cost of producing hydrogen is the only problem. A way to make and purify it more cheaply is needed.

Developments represented by the Interessen Gemeinschaft Farbenindustrie in Germany and Imperial Chemical Industries in Britain indicate, Mr. Allen said, that their operation will in time work against the chemical industry in the United States, which is prohibited by law from taking a leaf from the experiences of the foreign combines. But, the chemical industry in this country will protect itself. It has the trained men. Its future is allied with theirs.

By-Product Nitrogen

The by-product coking industry is economically sound, said C. J. Ramsburgh, vice-president of the Koppers Company. It has progressed through the application of continuous research. By-product ovens, which produced about 27 percent of the coke output in the United States in 1913, now produce about 92 percent. They produced 147,000 tons of combined nitrogen in 1927.

Fixation of nitrogen is economical only in large plants, said the speaker. Stoppage of a plant is, therefore, a serious matter. By-product plants are small and widely scattered. They serve best in peace or war, he declared. By-product ammonia must be made as long as coke is made. Sulphate of ammonia from the by-product source is likely to retain its popularity. Its production is economically justified. Its rate of output has been steady. It is an assured supply.

Nitrogen and Fertilizers

War demands and not the need for plant food, influenced the greater production of nitrogen, said H. R. Bates, manager of production for the International Agricultural Corporation. But, progress in this development has continued, even though that inference has been withdrawn.

The need for nitrogen is broad, said Mr. Bates. The function of the fertilizer is to supply plant food, efficiently and cheaply, to replace the loss of nitrogen from crops. This loss, he said, is almost 4,000,000 tons a year in excess of the nitrogen supplied to the farmer's fields. Only 6 percent of the loss is replaced. So, the fertilizer industry is economically sound. Its products will long be needed, and in increasing quantities. The increase will be in nitrogen content rather than in actual tonnage, because the use of concentrated plant foods grows.

Mr. Bates told of the changing practices in the fertilizer industry which have shifted the organic nitrogenates to the field of feedstuffs and more recently have tended to replace nitrate of soda with synthetic inorganic products. The price of nitrogenates, now low, must follow the pace set by the synthetic products. Sulphate of ammonia is a cheaper form of nitrogen than is nitrate of soda. The latter may be differently priced when the production of synthetic forms has been further developed in this country. The fixation process has advantages because it has a free raw material in the nitrogen of the air, sufficient over each square mile of the earth's surface to supply the world needs for twelve years.

Muscle Shoals as a nitrogen plant is an absurdity, said Mr. Bates. So to operate it would be an economically unfortunate disruption of industry.

Nitrogen bids fair to replace gold as a standard of national rank in Mr. Bates' opinion. An age of nitrogen approaches. The United States is now two-thirds of the way toward independence in supplies. The development of synthetic ammonia, a product of distinct advantage in the manufacture and storing of of fertilizers, will take it all the way.

International Nitrogen Problem

There has been a deal of fallacious reasoning with respect to world needs of nitrogen, said W. S. Landis, vice-president of the American Cyanamid Company. The supply in this country within two years will be far in excess of the demands of consumption. Consumption of the natural nitrate of soda is dwindling. By-product sulphate of ammonia increases slowly but steadily in importance and will not be replaced. The gain will come through synthetic production.

Mr. Landis cited the price of sulphate ammonia from 1913 to 1928, to show that it is now 27 percent lower than then. This he compared with a general price level of 40 to 50 percent above the prewar stage and prices of farm products higher than in 1913 for five years (with the one exception of cotton in 1926).

There has been no shortage of nitrogen since the war, he said; yet plants under construction will add 200,000 tons a year. Since 1913 the annual production has been increased 600,000 tons, the operation of 85 percent of the war-time plants (some of them at increased capacity) has a significant relation. The prediction of Crookes that the world would face starvation due to an insufficiency of nitrogen has been reversed. Politicians, however, still not recognizing that nitrogen is but one of three elemental plant foods have furthered the trend toward over-production, the wisdom of operating war plants being their excuse. But, the peak of production, Mr. Landis said, was in sight.

Small plants exist, said the speaker; so do restrictions to favor domestic production. Prices have been reduced. There is much propaganda to increase the use of nitrogen. Farm programs abroad, where the production of foodstuffs is not sufficient, must be viewed differently in the United States. So the exploitation of composite fertilizers must be looked upon as copied after American practices, the European farmer having been accustomed to apply his plant food elements separately. Although consumption of nitrogen in the United States is far below that in Europe, the needs of the former are so different as to make this natural. The consumption per acre in Belgium is not applicable here; the price of major farm crops is much lower in the United States.

There will be no starvation for nitrogen, Mr. Landis said. Sources of supply will be changed. Production processes will be changed. Plans now nearing completion cover well the demands of the near future. Beyond that the outlook remains good.

There was no discussion by the chemists of the papers on nitrogen economics. They indicated their interest in the chemical economy, however, by discussing the advisability of forming a section on economics in the American Chemical Society. This idea gave way to one of assuming a place for the discussion of economic subjects at future A. C. S. meetings. Williams Haynes, R. J. McKay, and Theodore M. Switz were named as a committee to arrange for such a discussion at the 1929 Spring meeting.

Combustion Symposium

A symposium on "Combustion" was held by the division of petroleum chemistry and division of gas and fuel chemistry Tuesday afternoon and Wednesday forenoon. George Granger Brown presided. Twenty papers were presented and discussed.

The multitude of subjects discussed at this symposium ranged from the mechanism of combustion, through the aspects of temperature, structure and energy of flames, to detonation in the internal combustion engine. Verbal descriptions were supplemented with motion pictures, lantern slides, and autochrome illustrations. The following papers were particularly of interest to the producer of motor fuels:—

Fuel Mixtures and Knock

John M. Campbell, Wheeler G. Lovell and T. A. Boyd

It was shown that the knock rating of one fuel with respect to another may depend upon the carburetor setting at which the comparison is made. The influence of mixture strength is often so large that, unless careful attention is given to this factor during knock measurements, it is possible to obtain widely discordant results in spite of what may otherwise be the best of experimental technic. If knock ratings of some fuels made by different laboratories are to be comparable, it is necessary for the different experimenters to agree upon some general specification as to the mixture ratio at which the measurements shall be made. Because it is both the point of highest intensity and one that can be located readily, it was proposed that knock measurements be made independently for each fuel at the mixture ratio giving its maximum degree of knock.

Fuel Accelerators and Inhibitors

T. E. Layng and M. A. Youker

An apparatus and a method for determining the effect of various inhibitors and accelerators of "knock" upon the slow oxidation of hydrocarbon fuels were described. The effects of the inhibitors and accelerators of knock upon the slow oxidation of n-heptane and its normal oxygen derivatives, gasolines, and a kerosene had been examined and data were presented. The oxidation of n-heptane in the gas phase appears not to be through its normal alcohol. Heptyl alcohol may be oxidized only with difficulty in the gas phase. Lead tetraethyl has the ability to delay the accelerating action of butyl nitrite, but, if once started, the path of oxidation is the same as when not delayed. Anilin, diphenylamine, lead tetraethyl, potassium ethylate, all are nihibitors of gas phase oxidation.

There is no relation between the engine-test evaluation of inhibitors and the values obtained in their slow oxidation data for gas phase oxidation.

Ethyl alcohol, anilin, diphenylamine, aluminum ethylate are not accelerators of liquid phase oxidation. Lead tetraethyl, potassium and sodium ethylate are accelerators of liquid phase oxidation when present in extremely small percentages. Lead tetraethyl, and potassium and sodium ethylate exhibit a surprising similarity of properties in affecting gas and liquid phase oxidation.

While slight absorptions of oxygen were obtained in certain of the tests, due to the known instability of peroxides and the difficulty of definitely determining their presence, the authors believe that these data should not be considered as confirming or rejecting the peroxide theory of oxidation of hydracarbons. From the data presented it appears that an ideal antiknock substance might be obtained by incorporating a powerful inhibitor of only vapor phase oxidation with a powerful accelerator of only liquid phase oxidation.

Fuel Detonation Theory

H. J. Masson

Based on a study of the action of various pure substances, binary mixtures, and gasolines in the internal combustion engine and a correlation of their autoignition temperatures, a general theory of detonation was advanced. Three distinct factors were postulated as determining the detonation characteristics of a fuel:—(1) The autoignition temperature, (2), the rate of flame propagation of the fuel-air mixture, and (3) the temperature of disruption or "cracking" of the fuel. By a combination of these factors all the observations thus far reported may be explained.

Polymerization Symposium

Because of the widespread industrial and scientific importance of polymerization, the symposium on this subject, held by the cellulose, leather and gelatin, and rubber divisions, Wednesday afternoon, attracted many members whose interests lay primarily in other divisions.

Polymerization was discussed in four papers and quite generally from the floor. It was also a popular topic in what are styled the "corridor sessions." The papers had to do with the broader aspects of polymerization, its relations to association and aggregation, the x-ray study of the phenomena, and the physico-chemical state of polymerized substances. The following paper is typical:—

Supermolecular State of Polymerized Substances

S. E. Sheappard, A. H. Nietz, and R. L. Keenan

The compounds, gelatin, rubber, and cellulose esters, may be represented by the formulas:—Rubber, $(C_5H_8)n$; cellulose, $(C_6H_{10}O_5)n$; protein, (N H C H R C O)n, where n indicates both an unknown magnitude and quality or kind of aggregation. The constitution of such substances is well contrasted between the "Association" theory of Hess and Pringsheim and the "macromolecular" theory of Staudinger.

A study of the behavior of these "high molecular" bodies in thin films and at interfaces is in agreement with Staudinger's conception of extended chains of atoms held by homopolar primary valences. The remaining interactions, i.e., orientations and condensations of these chains, are effected by development of alternating polarity along the chains and consequent mutual induction. The binding forces in this case (between the chains) may vary from Van der Waal's forces to electrostatic constraints. Under the influence of dissolvents, the macromolecular state may be brought to incipient dissociation, a state comparable with that postulated by the associationists.

Arsenicals and Health

Wide interest attended the assertions made by C. N. Mayers and Binford Thorne in a paper on "The Relation of Arsenic to Public Health," read before the division of biological chemistry. This paper had to do largely with the dangers which lie in the presence of arensic compounds on fruit, particularly apples, which have been sprayed with arsenical insecticides. It was stated that arsenic in excess of therapeutic doses has been found on apples in the New York market. The action of the British authorities in placing restrictions on the sale of apples from the United States on account of adherent arsenic was recalled. It was brought out in the course of discussion that the arsenical deposit can be removed by washing the fruit, when it has not been practicable to avoid it by refraining from late spraying. There was some difference of opinion as to the penetration of the arsenic into the apple from the blossom indentation where it chiefly lodges. It was generally agreed that the poison does not enter into the pulp of the fruit. A feeling that safeguarding health should be sought by control of spraying time and the use of other than arsenical agents when late spraying is necessary.

The biological division program comprised also papers of broad interest which treated of the physical, chemical, and medicinal properties of codliver oil. A joint session was held with the division of medicinal chemistry to hear a paper by Charles H. Herty on "National Responsibilities for Chemico-Medical Research." Dr. Herty is particularly desirous that some sort of institute be established for such research, and he seemed quite confident that this would be accomplished in the near future.

As usual, the division of organic chemistry had a voluminous array of papers, fifty-two in fact. In consequence, it was in session up to the last minute Thursday. Not all of its program had to do with products with polysillabic names; such more simply designated and more generally known, if no less complex, substances as acacia, alginic acid, and active sugar being discussed.

Still more voluminous was the program of the division of physical and inorganic chemistry, with sixty papers scheduled and a multilateral discussion of chemistry teaching methods with the division of chemical education. This di-

vision also carried its sessions well into Thursday. It elected the following officers: Chairman, V. K. LaMer; vice-chairman, W. V. Evans; secretary-treasurer, Farrington Davids; members of the executive committee, J. T. Scotchard, Mark Randall, J. K. Hildebrand, W. A. Noyes, Jr., S. C. Lind.

The educational and historical sides of chemistry were not neglected among the multitude of subjects. The teachers held meetings in various places, indoors and outdoors. The historians presented seven papers and had an exhibition of historical material in the lobby of the headquarters hotel.

The division of water, sewage and sanitation chemistry had an interesting program largely devoted to the treatment of industrial wastes. The following officers were elected:—Chairman, Stuart E. Coburn; secretary, W. D. Collins; members of the executive committee, R. C. Bardwell, W. D. Hatfield, C. P. Hoover.

Agricultural and Food Division

In a symposium on "Chemistry and the Food Industries," the division of agricultural and food chemistry discussed the contributions of the chemist to the progress of canning, packing, baking, milling, and various branches of the prepared food industry. Two particularly interesting topics were the following.—

Spice Industry

John Glassford

Spices were defined and classified as: simply aromatic, as nutmeg; aromatic and pungent, as pepper; pungent and acrid, as mustard. The essential constituents contributing to the flavor of the spices were enumerated: essential oils, resins, and crystalline materials. Non-essential constituents are important as furnishing data by which the purity of spices is usually determined. Federal standards for spices were criticized as based so largely on non-essential constituents. Further research on analytical methods as applied to spices was deemed desirable, to the end that the essential constituents may be more accurately determined than at present. Attention was called to the relation between the chemistry of spices and of essential oils. The principal constituents contained in the essential oils of spices were described. Those that have been produced synthetically were enumerated. Attention was called to the necessity of further research on the composition of a number of spice oils.

The condiment industry, including mayonnaise and other salad dressings, pickles and sauces, was touched upon and the double role played by spices as preservatives and flavors mentioned. The chemical problems of this industry, chiefly relating to the fermentation and preservation of its products, were discussed.

Citrous Products Industry

C. P. Wilson

The utilization of part of the citrous fruit crop through channels other than the fresh fruit market has been accomplished through application of chemistry and engineering. While the return from the sale of citrous fruit products does not cover the cost of production of the fruit, it does afford a salvage value that is considerable, and such utilization acts as an aid in regulating to some extent the operation of the law of supply and demand. Among the commercial products are citric acid, lemon oil, orange oil, concentrated orange and lemon juices, beverage syrups, peel products, and pectin. Of all these products, pectin is the one requiring most careful attention to every detail of production and use. Some specific problems relating to the production and use of pectin were presented.

Cellulose Division

Two sessions were held by the division of cellulose chemistry, and it also participated in the symposium on polymerization hereinbefore referred to. Among the ten papers presented at the separate session were the following:—

Flax-Straw Cellulose

Earl R. Schafer and Mark W. Bray

This paper dealt with some of the properties of flax straw grown for seed purposes and pulps produced therefrom, whirh may be of interest to the cellulose-using industries. The two components of the flax stalk which contain cellulose constitute aboot 90 percent of the plant. These components are widely different in their physical structure, the one, consisting of long, strong fibers called bast fiber, the other of very short fibers, which when separated from the bast are called shives. The chemical constitution of the two fiber aggregates is as widely different as their physical structure. The bast fiber consists of relatively pure cellulose with which is associated materials easily removed by organic solvents and dilute alkaline solutions. The shives, on the other hand, consist of a relatively smaller quantity of cellulose closely combined with lignin and pentosans in practically the proportions occurring in hardwoods. The chemical properties of pulps selected as being fairly well purified and containing relatively high percentages of cellulose and representing products of several types of pulping processes were discussed. The pentosan and lignin contents and the copper numbers are in general higher and the alphacellulose contents lower than for pulps ordinarily used in the nitrocellulose and viscose industries. Further purification would undoubtedly yield pulps which could be used in the production of these products.

Cellulose from Cornstalks

H. A. Webber

The total production of cornstalks in the United States each year was estimated at approximately 175,000,000 tons. The average yield per acre of dry stalks in the Corn Belt States is 2 tons, with 1.5 tons available for use as a source of cellulose. The cellulose content of the stalks is approximately 35 percent. The stalk is composed of three physically distinct parts. The methods of obtaining stalk cellulose are the same as those used for the delignification of woods, but to avoid loss of pith, short cooks and beating periods are employed. Average yields of pulp by the various methods were given.

Colloid Division

Many of the numerous phases of the application of colloidal processes and products were discussed in the two sessions of the division of colloid chemistry. Studies of colloid behavior were also presented. Among the twelve papers contributed to these sessions were the following:—

Measurement of Elasticity and Plasticity

Eugene C. Bingham and John W. Robertson

Investigators have heretofore been prevented from the measurement of elasticity and plasticity of highly plastic solids because of the lack of a method for separating elastic from plastic deformation. An apparatus was developed by means of which the direction of movement inside of a capillary tube can be rapidly reversed and measured. After measuring various rates of deformation, it is possible to estimate the instantaneous deformation which is a measure of the elasticity. Also from the manner in which the deformation increases with the time the data necessary for calculating the plasticity are obtained. The apparatus consists of a capillary tube, filled with the plastic substance containing a few particles which can be observed through a comparator and their movements measured. The two ends of the capillary tube are connected alternately and quite rapidly, up to say 1,000 times per minute, with a pressure reservoir or the atmosphere. This alternation is brought about by means of a sliding valve actuated by a motor traveling at a measured rate which may be varied as desired. The valve chest is filled with a thin oil in order to avoid the compressibility of a gas. Preliminary experiments with ammonium oleate dispersion in water show that it is a true solid since it has a definite yield value. It has a definite elasticity and moreover it obeys Hooke's law. Other plastic solids and viscous liquids are being studied.

Silver Sols

Simon Klosky

A method of preparing silver sols was given together with analyses of the resulting micelle. The density, viscosity, and migration velocity of these sols when diluted with varying amounts of ethyl alcohol have been measured. From these data the boundary potential has been calculated and found not to be in accordance with precipitation values of certain ions which were aleo determined. A tentative explanation for this disagreement was proposed.

Fluorine Analog of Silica Gel

Harold S. Booth and Walter J. Bauer

While working with the fluoride gases, observations were made which indicated a rather striking analogy between the behavior of silicon fluoride in liquefied phosphorus trifluoride and the behavior of silica gel.

Double Refraction of Cellulose Nitrate

James G. McNally

A novel type of polariscope was described, which is so constructed that the stage may be rotated about the light beam in any direction. By the use of this instrument it was found that the optical properties of cellulose nitrate films were dependent on the conditions of formation of the film. They are uniaxial if dried under tension from all directions, biaxial if held in two or three directions, and isotropic if allowed to contract freely in all directions. It follows, then, that cellulose nitrate molecules are orientated not by intramolecular forces, as has hitherto been supposed, but by stresses set up within the film on drying.

Adsorption by Silica

F. E. Bartell and Ying Fu

A study was made of adsorption of acids, bases and salts by silica from aqueous solutions. Both hydrated and dehydrated silica gels were used. It was found that inorganic acids were not adsorbed; organic acids were slightly adsorbed; while inorganic bases were strongly adsorbed. In general, the effects obtained with silica as adsorbent were the opposite from those obtained with pure ash-free carbon. The effect of other solvents upon adsorption was also studied.

Dye Division

Three sessions were held by the division of dye chemistry, M. L. Crossley, the chairman, presiding. The division's program listed eighteen papers covering various phases of the production and application of synthetic colors. Among the papers were the following:—

Color Specification

Walter M. Scott

The evolution of color understanding was traced through the earlier primitive conceptions of color up to the present modern conceptions. The earliest colorists derived their theories of color from the mixture of colored materials, such as pigments or dyestuffs. Later, with the growth of post-Newtonian science, there arose a great interest in regard to those excitable elements which existed in the retina, by whose action color nerve currents were sent to the brain. This led to the formulation of a number of theories based on color excitations. With the development of research on the spectrum, the close relationship of color to light was discovered. This led to the development of color specification on the basis of spectral reflection curves. Finally, with the birth of psychology, scientists began to see that there were complicated processes in the brain which could be observed directly in our minds as sensations. A careful study of color sensations led to the inevitable conclusion that color had three dimensions. The modern specification of color is, therefore, based on the sensation color solid. Illustrative drawings and color charts were shown.

Spectrophotometric Ratios

W. C. Holmes

The only type of ratio which has found extensive application in spectrophotometry hitherto is that of extinction co-efficients at the same wave length of different solutions of the same dye in the same solvent. Solutions of unknown dye contents are evaluated thereby through comparison with data obtained on solutions of known dye content, in accordance with Beer's law. A second type of ratio has been found to afford evidence respecting the relative degree of solute aggregation of dyes in different solvents; that is, the ratio of extinction co-effcients at the maxima in solutions of equal quantities of dyes in different solvents.

A third type of ratio, that of the extinction co-efficients of a solution at two different selected wave lengths, may be employed in determining the relative proportons of two dyes in admixture or the relative proportions of tautomeric forms of the same dye. Such ratios are of great use in the analysis of dye mixtures, in the study of tautomerism, and in the determination of hydrogen-ion concentrations and of the apparent dissociation constants of indicators. They afford a highly effective means of dye identification and criterion of dye purity.

Mr. Holmes also reviewed recent work carried out in the color and farm waste division to illustrate the variety of scientific investigation in which the application of spectrophotometric ratios and of spectrophotometric methods in general may prove of value.

Trihydroxy Phenols

C. V. Shapiro and R. C. Gibbs

Measurements on the absorption spectra of phthaleins of pyro-gallol, hydroxyhydroquinol and phloroglucinol in neutral, acid and alkaline solution were reported. The effect of varying the positions of the hydroxyl groups is very marked, both on the absorption spectra of the individual compounds and on those chemical properties which may be deducted from a comparative study of all the spectra. The relation of the above compounds to the mono- and di-hydroxy derivatives previously studied was pointed out. A point of peculiar interest in the light of the quinoid theory of color production is the fact that gallein, a colored compound, shows a pair of bands which have previously been found to be characteristic only of the colorless, lactoid phthaleins. These bands do not occur in the absorption spectra of related compounds, such as the fluoresceins and sulfonephthaleins, which definitely possess the quinoid structure. Hydroxyhydroquinolphthalein behaves anomalously when gradually increasing amounts of alkali are added to its neutral solution, for the visual absortion band shifts continuously toward the red and simultaneously changes in character, while its intensity passes through a maximum for intermediate concentrations of alkali. Proceeding hand in hand with these changes in absorption, there is a development and then a fading out of a bright green fluorescence.

Spectrophotometry and Dyeing

William D. Appel and R. T. Mease

In the final analysis, the value of a dye depends on the color, or spectral reflection, of the material to which it has been applied. Spectrophotometric reflection measurements give a quantitative record of the color and can be used to advantage in testing dyes, in the study and control of dyeing operations and in determining the fastness of dyed materials. Illustrative measurements made with relatively inexpensive apparatus were given.

R. W. French

For greater accuracy and convenience a method for the evaluation of mixtures of dyestuffs was proposed through a combination of the titanous chloride consumption and spectrophotometric findings. To make the method of practical value the determination of specific absorption values is necessary, and to make the values of specific application solvent effect is taken into consideration, or special solvents such as 50 percent alcohol used. With the spectrophotometric and titanous chloride constants available, it is practicable to use a simplified formula in the evaluton of dye mixtures as the observed values substitute only in the numerators of two fractions.

Mr. French described an improved spectrophotometer with a direct reading optical photometer and a vertical specimen holder for liquid specimens. The photometer permits of reading absorption values or percentage of transmission directly and affords the usual angular values or rotation for the indirect determination of photometric values through appropriate computation.

2-Amino Anthraquinone from Chlorobenzene and Phthalic Anhydride

P. H. Groggins and H. P. Newton

The authors have continued the work of Max Phillips with a view of developing a detailed procedure which would be applicable, not only to a 2-amino anthraquinone, but also a large number of other similar Friedel-Craft syntheses. The work has involved the preparation of a comparatively pure product at each stage without resorting to the use of organic solvents or costly recrystallizations. The chlorobenzoylbenzoic acids are obtained in a pure state with practically theoretical yields. On treatment with ammonia, the halogen derivative is converted to 2-amino anthraquinone of 95- to 96-percent purity. The impurities, characteristic of amidated products, are found to accompany the amino compound. Purification of the autoclave product by recrystallization from sulphuric acid was found to be an economical method of producing a relatively pure 2-amino anthraquinone which is suitable for the preparation of vat dyes.

Dilactames of Diphenacylfumaric and Diphenacylmaleic Acid

Marston Taylor Bogert and Irving W. Greenberg

The principal pigments of plants (chlorophyll), of bile (bilirubin), and of blood (hemin), by suitable means may all be broken down into derivates of maleimide or of pyrrole. Inasmuch as the deeply colored Pechmann dyes show absorption spectra and certain color reactions resembling those of the three natural pigments named, and are likewise derivatives of maleic or fumaric acid, differing only as a lactone differs from its lactame, the production of these lactames was undertaken for the purpose of gaining additional light upon the structure of these natural pigments. The experiments reported a few years ago by Bogert and Ritter indicate that the Pechmann dyes are probably trans-dilactones of diphenacylfumaric acids. These dilactones react with amines, and amino compounds, to yield the corresponding dilactames, most of which are very deeply colored and many of which are beautifully crystalline. These dilactames dye animal fibers generally violet or purplish shades. The stereo-isomeric dilactame of diphenacylmaleic acid is also described. Wool dyed by production of the Pechmann dye within the fiber is colored a yellow-brown to reddish-brown, depending upon the amount of dye used, and this dyeing is very fast to everything except direct sunlight. The reduction of these dilactames to true dipyrroles has not been accomplished as yet, in spite of many trials. Certain new Pechmann dyes were described.

Diphenylamine Blue and Nascent Carbon Dioxide

Irving W. Fay

By heating an intimate mixture of diphenylamine and oxalic acid to 130°-180° the insoluble diphenylamine blue (in the form of the oxalate) is produced. This work was carried out to determine what part of the oxalic acid furnished the methane carbon as the nucleus of the complex molecule. It must come either from the carbon monoxide or the carbon dioxide. Repeated attempts with the former gave negative results. Repeated experiments in passing cargon dioxide into diphenylamine and concentrated sulphuric acid did produce the blue but in such small quantities and in such a long time in comparison with heating mixed diphenylamine and oxalic acid that the theory of nascent carbon dioxide was proposed to explain the mechanism of the ordinary reaction.

Coupling of Diazonium Salts

J. B. Conant and W. D. Peterson

The rate of coupling of diazonium salts and phenols has been measured by a colorimeter method accurate to about 10 percent. Buffer solutions of definite acidity (pH value) and definite salt concentration were employed. A number of approximate determinations of the coupling range of a variety of diazonium salts and phenols led to the choice of the following combinations for the more exact study:—(1) diazo-ortho anisidin plus N. and W. salt; (2) diazo-orthoanisidin plus R salt; (3) diazosulphanilic acid plus para phenolsulphonic acid; (4) diazosulphanilic acid plus R salt; (5) diazosulphanilic acid plus N. and W. salt. The rate of the reactions approximated closely to that calculated by the bimolecular formula over a 100-fold change of concentration of the reactants, and was a function of the pH value of the buffer if the salt concentration was constant. Change of one pH unit changes the rate 10-fold.

Mechanism of Azin Formation

M. L. Crossley

This was a preliminary discussion of the mechanism of the reactions involved in the formation of azines. Based on recent work, it appears that diphenylamine is an intermediary step in azin formation. New reactions involving sulphonic acid salts of amines as initial material throw additional light on the mechanism of the azin reaction.

Oil-Soluble Solvents in Soap

Robert W. Jaeger, Jr.

Results contrary to a large amount of material found in the literature have been found on the comparative detergent efficiency of scouring baths, containing in addition to the usual soap and alkali or scouring assistants, an amount of incorporated hydrocarbons. Investigations were made using a modification of the American Oil Chemists' Society detergent method, on flannel material soiled in a CCl_4 solution of ceresin, lanolin, cylinder oil, and roofing tar. Solvents examined included hexalin, tetralin, and pine oil. Experiments were made with three types of soap:—Half saponified soap (showing 15 percent free fatty acid), fully saponified or neutral soap, and soaps containing an excess of Na_2CO_3. Quantitative results showing amount of soil present on the fabric, and relative efficiency of various soap solvent systems for removal of same were tabulated in detail.

A machine for testing the washing fastness of dyes, devised by the American Association of Textile Chemists in cooperation with the Bureau of Standards, was described in a paper by W. D. Appel, W. C. Smith, and Hugh Christison. C. A. Browne gave an interesting bit of history on the use of dyestuffs in New England by the Puritans and their successors, tracing the progress of dyeing down to the introduction of fuchsin.

Fertilizer Division

In order that the members of the division of fertilizer chemistry might attend the economic symposium on nitrogen under the auspices of the industrial and engineering division, the original program of the former was rearranged to exclude the Wednesday afternoon session and carried over. Because of the discussion of nitrogen at the joint meeting, the papers of the fertilizer program leaned somewhat in importance to the discussion of potash. Some of the topics were as follows:—

Potash: The World Situation in 1928

J. W. Turrentine

From the viewpoint of the world potash industry, conditions in 1928 are eminently satisfactory, being marked by a 20 percent increase in production and by prices, for the first time since the war, higher than the pre-war basis. The past year saw a production of over 1,700,000 tons of actual potash (K_2O), an increase of 45 percent over that of 1913, typical of the pre-war years. Consumption increased in all the principal potash-using countries. Germany still led in potash production, with France following in second place, these two through their combination dominating the world market with a combined production of over 1,600,000 tons actual potash.

The year saw the United States advance again to third place with a production of 44,000 tons K_2O, an increase of 86 percent over the preceding year. While this substantial gain will doubtless be maintained, the rate of increase is too great to be regarded as an established order. With the interest now existing in the development of an American potash industry and the diversification of raw materials of potash manufacture now undergoing preliminary exploitation, the continued growth of the domestic industry can be confidently expected.

Poland is fourth in order of production with properties under rapid development and with reserves and a national policy which should operate to restore her to third place in the order of relative importance and possibly make her a factor in the European market.

The new factor of greatest interest in the world situation is the Russian deposits, which, according to apparently well authenticated reports, are enormous in extent and easily accessible for mining operations. Their exploitation as a communistic enterprise by the Russian people contains so many unfamiliar elements that prophecies as to the bearing of these deposits on the world market would at this time be of slight value. The ease with which subsidies may be applied to the development of the natural resources of that nation injects an element of uncertainty as to how insuperable is the difficulty represented by the geographical inaccessibility of the potash deposits.

In the course of general discussion it was pointed out that the index number of potash prices stood at 94 in August, this year, compared with a prewar normal of 100.

Conversion of Potassium Chloride to Potassium Sulphate

Edward J. Fox

While America produces approximately 77,000 tons of potash salt, about 85 percent

(Continued on page 52)

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Gasoline and Kerosene: Tankwagon and Service Station Prices

New England Territory

	Cents per gallon—Gasoline—Tankwagon.	Gasoline—Service station.	Kerosene.
Augusta, Me.	21	23	15
Boston, Mass.	18	20	15
Bridgeport, Conn.	17	21	15
Burlington, Vt.	20	22	15
Hartford, Conn.	18	22	14
Manchester, N. H.	20	23	15
New Haven, Conn.	18	22	15
New London, Conn.	17	21	15
Portland, Me.	18	20	14
Providence, R. I.	18	22	15
Springfield, Mass.	18	20	15
Worcester, Mass.	18	20	15

Trunk Line Territory

Albany, N. Y.	18	20	15
Allentown, Pa.	17	22	14
Altoona, Pa.	18	23	15
Annapolis, Md.	21	24	14
Atlantic City, N. J.	19	21	14
Baltimore, Md.	21	24	12
Binghamton, N. Y.	18	21	15
Buffalo, N. Y.	18	20	14
Cumberland, Md.	21	24	14
Dover, Del.	18	23	15
Erie Pa.	18	23	15
Harrisburg, Pa.	18	23	15
Newark, N. J.	19	21	14
New York, N. Y.	18	20	15
Philadelphia, Pa.	18	23	15
Pittsburgh, Pa.	18	23	15
Rochester, N. Y.	18	20	14
Scranton, Pa.	18	23	15
Syracuse, N. Y.	18	20	15
Trenton, N. J.	19	21	14
Utica, N. Y.	18	20	14
Warren, Pa.	18	23	15
Washington, D. C.	19	22	14
Wilkes-Barre, Pa.	18	23	15
Wilmington, Del.	18	23	15

Southeastern Territory

Atlanta, Ga.	22	24	14
Augusta, Ga.	22	25	16.5
Birmingham, Ala.	20	13	14.5
Charlotte, N. C.	21	24	14
Charleston, S. C.	21	24	14
Columbia, S. C.	21	24	14
Danville, Va.	22	25	14
Hickory, N. C.	21	24	14
Jacksonville, Fla.	20	23	11.5
Macon, Ga.	22	26	14.5
Miami, Fla.	23	26	14.5
Mobile, Ala.	19	22	14
Montgomery, Ala.	18	21	15.5
Mt. Airy, N. C.	21	24	14
Norfolk, Va.	21	21	14
Pensacola, Fla.	22	23	13
Petersburg, Va.	22	25	14
Richmond, Va.	22	25	14
Roanoke, Va.	22	25	14
Salisbury, N. C.	21	24	14
Savannah, Ga.	20	20	14.5
Tampa, Fla.	21	24	13

Southern Territory

	Cents per gallon—Gasoline—Tankwagon.	Gasoline—Service Station.	Kerosene.
Charleston, W. Va.	21	24	13
Chattanooga, Tenn.	20.5	23.5	15
Clarksdale, Miss.	20	23	12.5
Covington, Ky.	20	23	15.5
Gulfport, Miss.	21.5	24.5	14
Jackson, Miss.	20	23	13.5
Keyser, W. Va.	21	24	14
Knoxville, Tenn.	20.5	23.5	15
Lexington, Ky.	19	21	15.5
Louisville, Ky.	19	22	15
Memphis, Tenn.	17.5	17.5	14
Nashville, Tenn.	19	22	15
Natchez, Miss.	19.5	22.5	14
Parkersburg, W. Va.	18	21	14
Vicksburg, Miss.	19.5	22.5	14
Wheeling, W. Va.	21	24	14
Williamsburg, W. Va.	21	24	14

C. F. A. Territory

Chicago, Ill.	15	17	12
Cincinnati, Ohio	19	21	14.5
Cleveland, Ohio	19	21	14.5
Columbus, Ohio	19	21	14.5
Davenport, Iowa	18.5	20.5	12.3
Dayton, Ohio	19	21	13.5
Decatur, Ill.	15.2	17.2	12.1
Detroit, Mich.	18.8	20.8	13.7
East St. Louis, Ill.	14.1	16.35	11.2
Evansville, Ind.	18.4	20.4	13.4
Fort Wayne, Ind.	18.4	20.4	13.4
Grand Rapids, Mich.	18.7	20.7	13.6
Indianapolis, Ind.	18.2	20.2	12.2
Joliet, Ill.	15.4	17.4	12.3
La Crosse, Wis.	18.2	20.2	13
Madison, Wis.	17.3	19.3	12.1
Milwaukee, Wis.	17.1	19.1	11.9
Peoria, Ill.	15.2	17.2	12.1
Saginaw, Mich.	18.9	20.9	13.8
South Bend, Ind.	18.4	20.4	13.4
Toledo, Ohio	19	21	14.5

Intermountain Territory

Albuquerque, N. M.	22	25	17
Boise, Idaho	24.5	27.5	19
Butte, Mont.	23.5	26.5	19
Casper, Wyo.	19	22	13
Cheyenne, Wyo.	20	23	14.5
Denver, Colo.	19	22	14.5
Grand Junction, Colo.	22.5	25.5	18
Helena, Mont.	23.5	26.5	19
Pueblo, Colo.	19	22	14.5
Salt Lake City, Utah	22	25	17
Twin Falls, Idaho	24.5	27.5	19

Southwestern Territory

	Cents per gallon—Gasoline—Tankwagon.	Gasoline—Service station.	Kerosene.
Alexandria, La.	16	19	15
Baton Rouge, La.	16	18	13.5
Bartlesville, Okla.	16.5	18.5	10.5
Bristol, Tenn.	19	23	14
Dallas, Texas	17	21	11
El Dorado, Kan.	14.8	16.8	10.8
El Paso, Texas	18	21	17
Fort Smith, Ark.	18	20	13
Fort Worth, Texas	17	20	11
Houston, Texas	17	21	15
Joplin, Mo.	17.5	19.5	11.2
Kansas City, Mo.	17.9	19.9	10.6
Kansas City, Kan.	14.8	16.8	9.8
Lake Charles, La.	17.5	19.5	15
Little Rock, Ark.	23	24	13
Muskogee, Okla.	18	20	11
New Orleans, La.	17.5	19.5	15
Oklahoma City, Okla.	17	19	11
San Antonio, Texas	17	20	10
Springfield, Mo.	17.8	19.8	11.5
St. Joseph, Mo.	17.5	19.5	11.2
St. Louis, Mo.	16.6	18.9	11.3
Shreveport, La.	17.5	19.5	14
Texarkana, Ark.	18.5	22.5	13
Tulsa, Okla.	16	18	11
Wichita, Kan.	14.8	16.8	10.8

Pacific Coast Territory

Los Angeles, Cal.	17.5	20.5	15.5
Phoenix, Ariz.	23	27	21.5
Portland, Ore.	18.5	21.5	16.5
Pueblo, Colo.	18	18	15.5
Reno, Nev.	23	26	19
San Francisco, Cal.	18	21	15.5
Seattle, Wash.	17.5	20.5	16.5
Spokane, Wash.	21.5	24.5	20.5
Tacoma, Wash.	17.5	20.5	16.5

Western Trunk Line Territory

Des Moines, Iowa	18.5	20.5	12.3
Duluth, Minn.	18.5	20.5	12.9
Fargo, N. D.	19.9	21.9	14.9
Huron, S. D.	20.3	22.5	13.9
Keokuk, Iowa	18.5	20.5	12.3
McCook, Neb.	17.75	19.75	13.75
Minneapolis, Minn.	17	20.2	12.9
Norfolk, Neb.	16.75	18.75	12.75
North Platte, Neb.	17.75	19.75	13.50
Omaha, Neb.	16.25	18.25	12.25
St. Paul, Minn.	17	19	12.9
Scott's Bluff, Neb.	17.75	19.75	13.25
Sioux Cit , Iowa	18.1	20.1	11.9
Sioux Falls, S. D.	19	21	13.4

Explanatory Notes

Tankwagon and service station prices of gasoline quoted above include State taxes of 5c. per gallon in South Carolina, New Mexico, Arkansas, Florida, Virginia and Kentucky; 4c. per gallon in Arizona, Alabama, Georgia, Idaho, Maine, New Hampshire, North Carolina, West Virginia, Nevada, South Dakota, Maryland, Mississippi; 3½c. per gallon in Utah; 3c. per gallon in Tennessee, Delaware, Texas, Colorado, Michigan, Indiana, California, Iowa, Ohio, Vermont, Montana, Wyoming, Oklahoma, Pennsylvania and Oregon; 2c. per gallon in Connecticut, Wisconsin, Nebraska, Louisiana, Rhode Island, New Jersey, Washington, Minnesota, North Dakota, District of Columbia, Missouri and Kansas.

Gulfport, Miss., prices include Harrison county privilege tax of 2c. per gallon in addition to the State tax.

Georgia prices include 1c. a gallon tax on kerosene; Alabama, ½c. on kerosene; Florida, 0.125c. on both gasoline and kerosene; Kansas City, St. Louis, St. Joseph and Springfield. Mo., prices on gasoline include a ½c. local tax; Montgomery, Ala., and Pensacola, Fla., prices include local taxes of 1c. on gasoline.

In Standard Oil of Indiana territory tankwagon prices for kerosene subject to 1c. discount on dumps of 50 gallons or more.

Outside the Chicago district the following quantity discount schedule is in effect on monthly tankwagon deliveries of gasoline:—6,000 gallons or more, 1½c.; 10,000 gallons or more, 2c.; 15,000 gallons or more, 3c.

Within the Chicago district the following quantity discount schedule is in effect on tankwagon deliveries of gasoline:—750 to 2,000 gallons, ½c.; 2,000 to 3,000 gallons, ¾c.; 3,000 to 6,000 gallons, 1c.; 6,000 to 10,000 gallons, 1½c.; 10,000 to 15,000 gallons, 2c.; 15,000 gallons or more, 3c.

If the quantity bought during the year is equal to or exceeds 12 times the agreed monthly quantity, the discount is paid or credited on the entire quantity at the close of the term, less the monthly payments made during the year.

In Oklahoma the Magnolia Petroleum Company and other marketers have established the following schedule of discounts:—Over 750 gallons a month, ½c. per gallon; over 2,000 gallons, ¾c.; ovr 3,000 gallons, 1c.; over 4,500 gallons, 1¼c.; over 6,000 gallons, 1½c.; over 8,000 gallons, 1¾c.; over 10,000 gallons, 2c. If the quantity bought during the year is 12 times the monthly agreed purchases, the discount will be paid or credited for the year, less any monthly purchases. The schedule for service station deliveries is as follows:—Over 200 gallons a month, 1c. per gallon; over 300 gallons, 1¼c.; over 400 gallons, 1½c.; over 500 gallons, 1¾c.; over 600 gallons, 2c. The same rule holds good for annual purchases as in the tankwagon discounts.

Oil Credit Men Elect

W. A. Ryan, treasurer of the Midcontinent Petroleum Corporation, Tulsa, Okla., was elected president of the Petroleum Refiners' Division of the National Association of Credit Men, at a three-day convention at the Palmer House, Chicago, ended September 6. E. B. Moran, Chicago, manager of the central division of the national association, was chosen secretary of the refiners' division and also manager of the Chicago and Tulsa offices.

The following directors were elected:—H. R. Wakefield, Sun Oil Company, Philadelphia; H. R. Hawkinson, Tide Water Oil Company, New York City; R. E. Holcomb, Skelly Oil Company, Tulsa, Okla.; F. R. Seleine, Shaffer Oil & Refining Company, Chicago; E. C. Claiborne, Derby Oil Company, Wichita, Kan.; E. F. Harrell, Deepwater Oil Refineries, Inc., Houston.

The credit man can go far toward remaking policies of the petroleum industry, Mr. Ryan declared in an address before the conference. He said in part:—

He must first put his house in order and make his department an institution of foresight, personality, accuracy and dependability. Further, his relationships must be based on the numerous contracts enumerated and his ability demonstrated for both calm judgment and sympathy. With an understanding of the viewpoint of the other fellow, his capacity will be utilized to expand constantly the number of his customer accounts and the corresponding volume of merchandise, thereby doing his bit toward controlling overhead and keeping down the ratio of bad debts. If he recognizes the necessity for courage in taking on new commitments and has the backbone to accept his responsibility in such cases where disaster follows; if he faces squarely the necessity for progressive increases in sales without overlooking the hazards attendant upon all forward movement; if he is capable of being conservatively enthusiastic and enthusiastically conservative and can steer that happy course between unbridled optimism and morbid pessimism, he can fulfill his destiny.

Longer Terms

The tendency in the petroleum industry is to lengthen terms on which tankcar gasoline is sold to distributors, it was pointed out by L. R. Cook, credit manager, Marland Refining Company, Ponca City, Okla., who said in part:—

We note a tendency on the part of refiners to lend customers considerable sums of money for a fairly long period of time, taking as security a chattel mortgage on equipment, guarantee of some responsible individual or, only too often, "what have you?" Personally, I do not favor such a practice, but it seems to be a growing custom in the trade and whether we like it or not, the indications are that it will continue to increase.

Mr. Cook advocated these points for adoption for mutual advantage:—

1. Closer contact with accounts, including periodic requests for financial statements and checking with other houses, both refiners and those engaged in kindred lines of business.

2. An even more liberal interchange of information among refinery credit men than that which now exists.

3. Refusal of refiners to "bail out" (for that is what it usually amounts to, according to Mr. Cook) other refiners for the purpose of getting an account away from a competitor.

J. F. McLaughlin, credit manager of the Indian Refining Company, detailed how his company devised an effective method of handling collections, saying in part:—

The first step in the adoption of the new system necessitated decentralization of our accounts, receivable records and credit and collection records from the general office to a district office. Eight district accounting and credit and collection departments were organized. In each office a credit manager was placed for the purpose of carrying on the credit and collection functions of the company for his particular district. It was not long after this change that our credit men gradually knew personally most of the accounts in their district. They not only knew the customers they were dealing with, but knew the conditions in the customer's area. With this information they were able to intelligently and tactfully handles each collection situation that arose. It is aso important to know that we hold each salesman responsible for the collection of his own accounts. We depend on him to call regularly on his customers and perform the sales and credit and collection functions that are necessary.

West Texas Oil Freights Are Cut by Santa Fe R. R.

The Atchison, Topeka & Santa Fe Railroad, September 27, will make effective material reductions in petroleum rates from Pecos in west Texas to market centers in the middle west, which is expected to be the opening move in a general trend toward lower freight rates on oil products moving to market from the whole west Texas refining district.

This, it is widely believed, will have an important effect on the present alignment of buyers and sellers in the oil trade, inasmuch as it will bring nearer equality shipping charges on products from the older established refining districts of Kansas, Oklahoma and north Texas, and the fast growing west Texas district.

Other carriers are scheduled to follow the Santa Fe road's action later in the fall. The Texas & Pacific had previously announced that somewhat lower rates would be made soon on shipments from Pyote and Wickett.

The reduction in fuel oil rates will be large. The new rate to Kansas City will amount to a cut of 2.5 cents per hundred pounds and to St. Louis 3.5 cents. To Chicago the cut on fuel oil will be 4 cents per hundred pounds. The fuel oil rate from Pecos to Chicago will total 33 cents per hundred, or about 12½ cents above the rate on fuel oil from Oklahoma to Chicago. It is expected that proportional reductions will be published by the Santa Fe road on shipments through St. Louis and Chicago to points east.

Gasoline rates from Pecos to Chicago and St. Louis are cut in the new rates, 4.5 cents per hundred pounds.

Polish Oil Output Higher

Production of petroleum in Poland during the first half of the year increased 4 percent over the corresponding period of 1927, amounting to 368,537 tons. It is now indicated that the year's output will exceed that of any year since the war. The maximum output of petroleum in Poland was reached in 1909, reaching 2,000,000 tons.

India Rejects Oil Tariff

The Indian government last week approved the findings of the Indian Tariff Board that there is no need for an import tariff on petroleum products, to safeguard domestic oil companies, notably the Burmah Oil Company.

The board had ruled that there should be no tariff because it is unlikely that oil imports will be of any considerable proportion during the next two years. The request followed the import of Russian refined products into India by the Standard Oil Company of New York.

Midcontinent Refineries Continue High Production

TULSA, Sept. 12, 1928.

While runs of crude petroleum to stills at Midcontinent refineries September 1 constituted a new high record in operating levels for those plants, stocks of gasoline on hand at these plants were estimated to be the lowest in years.

Gasoline stocks held by Midcontinent refiners September 1 are estimated at 1,950,000 barrels, a decline of 125,000 barrels from stocks as of August 1. The decline was registered principally in the State of Oklahoma.

While August saw a decrease in runs, it also saw refining operations for the whole Midcontinent district stepped up to a new high record. Runs of crude oil through refineries in that section September 1 totaled 535,000 barrels daily. This compares with 521,000 barrels daily as of August 1.

Following are the figures on stocks for September 1 and August 1:—

	Barrels—Sept. 1.	Aug. 1.
Oklahoma	950,000	1,075,000
Kansas	290,000	340,000
North and West Texas	610,000	580,000
Louisiana-Arkansas	100,000	80,000
Totals	1,950,000	2,075,000

These figures would indicate that Oklahoma refiners enjoyed such a large demand that they were responsible for most of the decline, and that while there also was a fair-sized decline in Kansas, this was offset by increases in North and West Texas (mainly in West Texas) and in the Louisiana-Arkansas district.

Following are comparative figures on runs of crude oil at Midcontinent refineries for September 1 and August 1:—

	Barrels—Sept. 1.	Aug. 1.
Oklahoma	202,000	192,000
Kansas	94,000	94,000
North Texas	98,000	100,000
West Texas	69,000	64,000
Louisiana-Arkansas	72,000	70,000
Totals	535,000	521,000

These figures show that most of the increase in refinery operations in the Southwest developed from Oklahoma, with West Texas also contributing to the increase. While runs of this proportion constituted a new high record, it is pointed out that omitting west Texas from the picture, in order to get a comparison with conditions as they were in 1927, total runs would be lower, although this is to some degree questionable as refiners in other districts probably would have stepped operations up further had not West Texas refineries been in operation.

At present many older Midcontinent refiners are still running much below rated capacity. However, even with the new West Texas refining district active, it is considered significant that refiners have been unable to keep pace with the demand.

Tanker Explosion Kills

Five seamen were killed and four others were injured in four explosions at sea September 12, on the tank steamship "Shreveport," bound from Philadelphia to Gulf ports, near Frying Pan Shoals, off the coast near Southport, N. C. Twenty-nine survivors were rescued by the Spanish steamship "Aldecoa."

The tanker of 4,000 tons, owned by the Cities Service Company, was travelling in ballast from Philadelphia to Gulf ports.

N. Y. Cuts Oil Freights

ALBANY, Sept. 12, 1928.

The New York State Public Service Commission has approved new freight rates on petroleum and petroleum products, carload as follows:

Erie Railroad—From Wellsville to Medina (on New York Central), 16.5c., reduction 7.5c. per cwt., effective October 1.

New York Central (East) from Albany and Rensselaer to Port Jervis (on Erie) 25.5c., reduction 3c. per cwt., effective September 30.

West Shore Railroad, from Albany to Port Jervis (on Erie), 25.5c., reduction 3c. per cwt., effective September 30.

West Shore Railroad, from Albany to Middletown (on New York, Ontario and Western), 25.5c., reduction 3c. per cwt., effective September 6.

New York Central (East) from Albany and Rensselaer to Hamilton and Solsville (on New York, Ontario & Western), 22.5c., reduction 1.5c. per cwt., effective September 6.

Mexican Oil Taxes

Mexican petroleum production and export taxes for September have been fixed as follows, according to the Association of Producers of Petroleum in Mexico:—

	Production.	Export.
Crude, Be. 20.38, bbl.	$0.18990	$0.07948
Crude, Be. 15.68 or heavier, bbl.	.08740	.04928
Fuel oil, Be. 17.21, bbl.	.12480	.0636
Gasoline (crude), gal.	.00563	.00712
Gasoline (refined), gal.	.00283	.00356
Kerosene (crude), gal.	.00485	.00227
Kerosene (refined), gal.	.00243	.001135

French Coloring of Gas Oil Covered by Decree

A French decree of July 29, relates to the application of the French law of March 16, 1928, which revised the duties on petroleum products, and to the coloring of gas oils imported at reduced duties. The decree gives specifications, for the application of duties, taxes, etc., of crude oil, kerosene, gasoline, heavy oils, water-white type, gas oils, fuel oils, road oil, pitch petroleum coke, paraffin, and petrolatum.

The decision provides that gas oils admitted at reduced rates must, before being taken out of the warehouse, have added thereto a red coloring matter, industrially known as P.1566, or Congo red, in the proportion of 0.030 gram per liter. This coloring is done at the expense of the interested person.

Seminole Drilling Ban Lifted from Two Pools

TULSA, Sept. 14, 1928.

Because of the insistence of the Marland Oil Company that it would start a well in the Mission pool of the Seminole oil field, operators meeting here agreed today to lift the drilling ban on the Mission and Maud pools. Drilling of approximately sixty wells will be permitted from September 17, one well to each 40-acre tract. Production at the new wells must be held up until January 5, 1929.

The Marland company has not agreed to this plan. It insists on drilling its lease, agreeing, however, to prorate production on the basis of a Statewide plan.

Magnesium Chloride and Magnesite

TRADE SPEID-WHIT MARK

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VICTOR CHEMICAL WORKS
CHICAGO NEW YORK NASHVILLE ST. LOUIS

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CALCIUM CHLORIDE
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Single-Unit Tank Cars *Multi-Unit Tank Cars (1-ton containers)* *150-lb. Cylinders*
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Fused 60-62%
SODIUM SULPHIDE STRIPS
Packed in the "Red-Cap" drum

A uniformly pure material which dissolves readily

BARIUM REDUCTION CORPORATION
Charleston, West Va.

Industrial Chemicals

Producers Lower Chromic Acid Despite Extensive New Buying—Barium Salts, Chlorates and Soda Silicofluoride Higher

The chemical market last week reflected the change in seasons. This had been accompanied by further evidences of expansion in manufacturing enterprises the country over. There was a well defined tendency towards increased shipments in most of the major chemical items. This was favorably regarded inasmuch as the summer months had been featured by irregularity in quite a number of items due to curtailed operations in a great many industries. The principal event last week was the announcement of a 1c. reduction in quotations for chromic acid by some producers, although this was not followed by others. The popularity of chrome plating in the automotive industry has steadily increased and some of the producers found their output sold ahead.

Soda silicofluoride was advanced ½c. per pound by the domestic producers last week in reflection of the change in the method of computing the import duty on the basis of American valuation instead of foreign valuation. Soda acid fluoride was another product which was showing firmer tendencies as the laundry industry was reported to be taking hold of it in a more comprehensive manner. The expectation that 1929 contract prices would be named on some chemicals within the course of another month to six weeks was cited in some quarters of the market. So far as a majority of the items were concerned, however, it was regarded as a little too early to expect any definite announcements as yet.

Domestic producers were in receipt of a decidedly satisfactory volume of contract business from battery manufacturers in sal ammoniac. They pointed out that foreign sal ammoniac was not giving as much competition as had been the case earlier in the year. A moderate reduction came under review in argols, although there had been no important arrivals of this product from Latin America for several months. Big sales came out in barium chloride in which the price tendency continued upward. The shipments of alkali products for the account of the glass, soap, paper and chemical trades were running in full volume. None of the insecticides showed any great amount of activity, although some in the trade were optimistic on the outlook that larger quantities of calcium arsenate might be required before the end of the season.

Current prices on industrial chemicals, formerly printed on pages 8 and 10, are now printed at the end of this market report.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced
Argols, 30 p.c., 2c. per lb.	Antimony metal, ½c. per lb.
80 p.c., 2½c. per lb.	Soda silicofluoride, ½c. per lb.
Chromic acid, 1c. per lb.	
Tin metallic, ½c. per lb.	

Comparative Values

Index numbers compiled from twenty-five typical chemicals on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
155.7	155.7	155.7	152.5

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Alum.—The textile and tanning trades were taking fair sized shipments against regular standing contracts on the basis of quotations.

Aluminum Sulphate.—A firm market continued to rule on the iron free grades which were being quoted at $1.90 to $2.05 per 100 pounds in bags. The commercial grades were maintained at $1.40 to $1.55 in bags.

Ammonia Anhydrous.—In keeping with the sold-up condition of the market on this product prices were being firmly maintained in all quarters of the trade at 13½c. to 14c. per pound in cylinders.

Ammonia, Aqua.—A firm situation continued to rule in this product. The producers were quoting 2½c. to 2¾c. per pound in tanks, 3c. to 3¼c. drums, car lots, and 3¼c. to 3½c. per pound drums, less than car lots.

Ammonia Bicarbonate.—Moderate arrivals were noted from Holland. Prices here were not affected, however. It was too early as yet to get the full reaction of the trade to the lower contract prices which had been announced on this product as of July first. Demand has been rather light since that time. Contracts in this product are usually negotiated during the latter part of the year for the following year's supply.

Ammonia Carbonate.—Conditions remained much the same last week. There were moderate imports from Holland, which did not influence the price situation.

Ammoniac, Sal.—The problem of foreign competition was evidently less serious than it was earlier in the year. At any rate, domestic producers reported they were securing a substantial volume of contract withdrawals from the battery manufacturers. The contract price basis for the white was maintained at $4.70 per 100 pounds in casks whereas the domestic gray was held at $5.40 to $5.50 per 100 pounds in barrels. Recent arrivals included about 255,000 pounds at this city, Baltimore and Philadelphia from Holland.

Antimony Salts.—An improvement of ½c. per pound in the metal to 10¾c. per pound duty paid this city with futures quoted at 10⅛c. to 10¼c. per pound had not influenced the quotations for the powdered needle or the oxide.

Argols.—No recent imports were noted via Latin America, but in spite of this the tone of the market was reported weaker with offers of 30 percent crude at 7½c. per pound in casks, and 80 percent at 15½c. per pound in casks.

Arsenic.—Steady conditions ruled in this product last week. The white was maintained at 4c. per pound, car lots, kegs, and for smaller quantities up to 5c. per pound was quoted. The red was unchanged at 9½c. to 10c. per pound.

Barium Products.—Some comparatively large sales of barium chloride were reported to have been made at $58 per ton ex-dock. This brought the price within striking distance of the quotation named by domestic producers. The foreign was only being quoted for shipment within two to three months. Several other salts of barium, including oxide and silicofluoride, were not being offered in the usual quantities last week.

Bleaching Powder.—This product was maintained on the basis of $2 to $2.35 per 100 pounds car lots works and $2.15 to $2.60 for less than car lots. Contract withdrawals have shown an improvement of late, it is reported.

Blue Vitriol.—The inquiry had about terminated for the season. Producers' quotations remained unchanged at $5.30 to $5.40 per 100 pounds, car lots, barrels and $5.85 to $6 for less than car lots, barrels. The present lull in the market was regarded as likely to provide an opportunity for the producers to build up reserves. The copper metal market has been well maintained on the basis of 14¾c. per pound delivered to the Connecticut Valley, whereas for export a quotation of 15c. c.i.f. European ports has been maintained. Most of the domestic buying of copper was for October delivery, and the volume was the largest last week of any corresponding period in several years past. Some of the copper producers were said to be favoring a 15c. copper market. Production of refined copper in North and South America in August totaled 143,560 short tons, against 135,092 tons in July, 131,024 tons in August, 1927, according to the American Bureau of Metal Statistics. Shipments of refined copper during the past month amounted to 143,638 tons, against 139,030 tons in July; 138,503 tons in June, and 130,520 tons in August a year ago. Stocks of refined copper on hand at the end of August aggregated 54,093 tons, as against 54,871 tons a month earlier, 58,809 tons at the end of June and

Valuable information on Imports and Exports of Industrial Chemicals is given in port lists beginning on page 5.

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Caustic Potash Liquor 45%
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To the fulfillment of this ambition are brought resources of plants, facilities and organization adequate to the task . . . and beyond even these the practice of the old fashioned, homely virtues of business integrity, responsibility and fair dealing.

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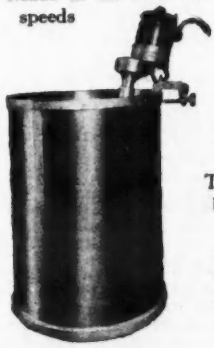

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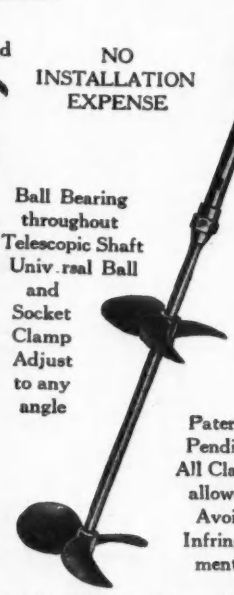

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229 East 38th St. New York, N. Y.

93,654 tons at the end of August, last year.

Calcium Chloride.—Shipments of this product were going ahead in good volume. None of the producers had further changed their contract quotations. There was an arrival of about 124,000 pounds from Germany.

Carbon Tetrachloride.—A fairly good demand was uncovered for this product last week. Prices remained at 6¼c. to 6½c. per pound car lots drums and 6½c. to 7c. per pound less than car lots drums.

Chlorine.—The usual outlet for water purification purposes accounted for considerable quantities of this chemical. The general undertone of the market appeared to be well sustained.

Fluorspar.—The ceramics industry continued to support the market by some rather substantial purchases. The enameler's 96 to 98 percent was held at $37.50 to $40 per ton in bags.

Glauber's Salt.—Reports from various textile centres indicated a resumption of operations on a more extensive scale. The domestic was quoted at $1 per 100 pound car lots, bags and for less than car lot quantities a price of $1.15 to $1.65 per 100 pounds as to packing and size of order was made.

Lead Acetate.—The stocks of refined lead were reduced some 2,000 tons during July, leaving a total of 45,719 tons on hand the first of August. The metal has remained steady at 6.40c. per pound, delivered this city and producers have reported that contract withdrawals have been in rather good volume.

Lime Acetate.—There were some fair sized arrivals last week from the United Kingdom as well as from the West Indies. The situation was an extremely firm one as a good many wood plants were reported to have suspended operations.

Magnesite Calcined.—Nearly half a million pounds came in from Holland. he demand for the product in the metallurgical industry as well as for the manufacture of magnesite salts continued rather active.

Magnesium Chloride.—The ceramics and textile industries were reviving their purchases of this product, which was firmly quoted at $36 to $37 per ton for the domestic in barrels. The foreign could be had for about $3.75 per ton less.

Manganese.—The salts of this product including chloride dioxide and sulphate were all being firmly maintained in all quarters of the trade. A fairly good contract movement continued in progress.

Nickel Salts.—While nickel plating was not being pushed as urgently as chrome plating, there was no suggestion of any change from the recent character of trading in this class of products last week.

Potash Carbonate.—The chemical houses were in receipt of fair-sized inquiries. There was no report of any price change. Arrivals have been running rather full of late, upwards of 200,000 pounds having recently been received from Germany and Holland.

Potash Caustic.—Arriving parcels of the foreign were being readily absorbed. Hence the undertone of prices remained quite steady.

Potash Chlorate.—There was not much new inquiry around last week despite reports that a higher market might be anticipated during the course of the next few weeks. Importations from Germany and France were running rather full last week. Some disposition has been shown by match makers to close contracts at or near the current level of prices.

Potash Prussiate.—The regular contract movement was reported as being of generally satisfactory proportions. The yellow was held at 17½c. to 18½c. per pound in casks, and the red at 38c. to 40c. per pound.

Salt Cake.—Those who had been anticipating an improvement in the position of this product have yet a while to wait. The import movement in the foreign continued quite extensive and it was known that bulk goods could still be had at from $10 to $17 per ton.

Soda Ash.—The total movement for the account of the chemical, glass, soap and paper trades was along broad enough lines to give producers every encouragement. The light 58 percent was holding at $1.32 in bags, and the dense at $1.37½ in bags, car lot shipments.

Soda Caustic.—Domestic consumption was reported to be considerably heavier than it was not so many weeks ago. The producers said last week that conditions appeared to be favorable for an expanding volume of shipments. Export buying was being done at prices ranging from $2.80 to $3.10 per 100 pounds, depending on size of orders and point of destination.

Soda Chlorate.—Although business had been done in the foreign at as low as 5.80c. to 6c. per pound, it was known that foreign goods had sold as high as 6¾c. to 7c. Handlers of the foreign were endeavoring to equalize the works price from Niagara Falls. Contract withdrawals in the domestic generally have continued of large proportions. It has been established that this is the best chemical product available to combat quack grass.

Soda Phosphate.—Notwithstanding that importations have continued to reach rather liberal proportions there has been no consequential change in the position of this product during the past few weeks. In fact, the producers continue to quote 3¼c. to 3¾c. per pound for the dibasic in barrels, while naming .039c. to 4½c. per pound for the tri-basic.

Soda Silicate.—Producers were quoting 38 percent opalescent at 55c. per 100 pounds, 38 degrees clear at $1.05, 40 degrees opalescent 60c., 40 degrees clear $1.10, 42 degrees opalescent 65c., 42 degrees clear $1.25, 47 degrees opalescent $1.25, and 52 degrees clear $1.35 per 100 pounds. The 60 degrees was held at $1.65 per 100 pounds in drums.

Soda Silicofluoride.—Domestic producers advanced their prices to 5¼c. per pound, car lots, barrels, and 5½c. per pound for smaller quantities last week. The import duty will be assessed on the basis of 25 percent of the American valuation after September 30, it is believed, which means an advance of substantially ½c. per pound in the rate.

Soda Acid Fluoride.—This product which, in conjunction with soda silicofluoride, is so popular for laundry usages is shortly expected to become much more active. Existing patents under which it is produced are expected will expire next February.

Soda Sulphide.—There were suggestions of further price shading last week when it was indicated that offers of the 30 percent had been made from some directions at as low as $1.85 to $2.25 per 100 pounds, while the 60 percent could be had for as low as $2.75 to $3.50.

Tin Products.—Although the metal advanced ½c. to 47c. per pound, there was no suggestion of any change in any of the salts of tin.

Zinc Chloride.—Some in the trade were looking forward to a higher duty. This had not affected the outlook in the chemical except that some holders were inclined to ask a slight premium.

Zinc Sulphate.—A few offers were reported to be coming out at fractionally lower prices, notwithstanding there had been no change in metal valuations.

Acids

While large producers of chromic acid were adhering to previous price levels of 21c. per pound in lots of 1,000 pounds, and quoting lots of 10,000 pounds and more up to 21c. per pound, f.o.b. works, one producer had lowered his schedule about 1c. per pound and was quoting 1,000 pounds or more 20c. per pound, 500 to 1,000 pounds, 20½c., and 100 to 499 pounds, 21c., freight allowed or delivered. There was an extensive demand from the automobile industry which bids fair to further increase its purchases. Formic acid had a firmer undertone, as there was a report that the duty may soon be assessed on the home market value. Oxalic acid also met a better demand. There was a sustained firm tone in lactic acid.

Comparative Values

Index numbers compiled from twelve typical acids on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
106.9	106.9	106.9	109.1

Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Acetic.—Firm conditions were the rule throughout the market last week. The producers were basing their prices on the higher schedules for acetate of lime.

Boric.—Both the foreign and the domestic outlets were holding up well to recent totals. Contract schedules had not changed.

Chromic.—One producer revised the price downward, quoting lots of 1,000 pounds or more at 20c. per pound, although another prominent producer quoted 21c. for the same quantity. Chrome plating has swept the automotive industry and while it is a more expensive process than nickel plating, it bids fair to increase in popularity as it lasts longer. The producers were pretty well sold up. Cost of importing the foreign was as high as 25c. per pound.

Citric.—The domestic makers had not changed their quotations of 46c. per pound for the crystals in barrels nor 47c. for the powdered in barrels. Foreign was giving no worth while competition.

Formic.—While sales had been uncovered recently as low as 10¼c. per pound, there has recently been an upward tendency in the base product which has strengthened the price to 11c. to 12c. per pound. Two new makers were reported to have entered this field lately.

Hydrofluoric.—The condition in this acid was a firm one reflecting the strength of the other mineral acids.

Lactic.—The demand continued fair. Producers reported no change in their contract quotations.

Muriatic.—Good shipments for the account of the metallurgical industry were reported. Contract prices were being maintained.

Nitric.—In keeping with the strength

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Diamond Alkalies Please the Most Critical Buyer

—for the reason that the most critical standards of quality are constantly maintained in the manufacture of Diamond Alkalies from raw materials to finished product.

If you are particularly exacting in the selection of your alkalies try Diamond Brand Alkalies—they always please the most critical buyer.

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QUALITY

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Carbon Tetra Chloride **Carbon Bi-Sulphide** **Calcium Chloride** (Flake and Solid)
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Birmingham	Brooklyn	Chicago	Detroit	New Haven	Paterson	Pittsburgh	St. Paul

GRASSELLI GRADE
A Standard Held High for 89 Years

in all other mineral acids the tone of this acid was firm.

Sulphuric.—A well sustained position was reported by the producers. Expansion of acid producing capacity at Southern points suggested a firm condition of affairs generally.

Tartaric.—Although argols were in a weaker position than they had been, this had not influenced tartaric acid which was maintained at 38c. per pound for the crystals or powdered in barrels and at ½c. more for kegs.

Insecticides

Only odds and ends were reported to be moving during the course of last week's trading. The season in calcium arsenate had been disappointing as a general rule, although it had not definitely terminated. The infestation of weevil has been quite general in the coastal plains states in the South and the weevil has also appeared in large numbers in the Delta sections of Arkansas and Mississippi. Therefore, if rains continue heavy during September they are expected to damage large bolls as well as small ones. Considerable quantities of copper carbonate were being absorbed by Eastern wheat growers, although Western planters had already covered their requirements.

Bordeaux Mixture.—The paste was being maintained at 10½c. to 11½c. per pound in barrels.

Calcium Arsenate. — The contract price was unchanged although occasional orders were uncovered at something less.

Lead Arsenate. — The metal was maintained at 6.40c. per pound occasioning no change in the contract basis of the powdered arsenate which was 13½c. to 15½c. per pound in drums.

Nicotine.—Both the 95 percent and the sulphate were in a sold up condition as a result of the extensive activity of the past summer.

Current Prices

(For late price changes, see page 2)

Aldehyde ammonia, drums	lb.	.65 @	.70
Alum, ammonia, burnt, U.S.P., barrels	lb.	.16 @	—
ground, barrels	100 lbs.	3.35 @	3.45
lump, barrels	100 lbs.	3.25 @	3.35
powder, barrels	100 lbs.	3.65 @	—
ammonia-chrome, barrels	lb.	.05¼@	.05½
potash, ground, barrels	100 lbs.	3.10 @	3.20
lump, barrels	100 lbs.	3.00 @	3.10
powder, barrels	100 lbs.	3.40 @	—
potash-chrome, barrels	lb.	.04½@	.05
soda, barrels	lb.	.03½@	.04¼
Aluminum, 98@99 p.c., virgin	lb.	.2430@	—
hydrate, heavy, barrels	lb.	.06½@	.08½
light, barrels	lb.	.16 @	.17
sulphate, commercial, works, bags	100 lbs.	1.40 @	1.55
iron free, works, bags	100 lbs.	1.90 @	2.05
Ammonia, anhydrous, cylinders,	lb.	.13½@	.14
aqua, 26 deg., carboys	lb.	.05¼@	—
drums, car lots	lb.	.03 @	.03¼
less than car lots	lb.	.03¼@	.03½
tanks	lb.	.02½@	.02¾
bicarbonate, car lots, barrels, contracts	100 lbs.	6.00 @	—
less car lots, barrels, contracts	100 lbs.	6.25 @	—
shipment	100 lbs.	6.50 @	—
bifluoride, barrels	lb.	.21 @	.22
carbonate, domestic, barrels	lb.	.12 @	.13
imported, casks	lb.	.08 @	.10
chloride (see ammoniac, sal),			
fluoride, barrels	lb.	.19 @	.21
nitrate, technical, casks	lb.	.06 @	.12
persulphate, cases	lb.	.27 @	.30
phosphate, technical, barrels	lb.	.12½@	—
sulphocyanide, kegs	lb.	.36 @	.48
Ammoniac, sal, gray, domestic, car lots, barrels	100 lbs.	5.40 @	5.50
less car lots, barrels	100 lbs.	5.90 @	6.50
imported, casks	lb.	.05½@	.06
lump, imported, barrels	lb.	.10½@	.11
white, domestic, granular, casks, car lots, contracts, works	100 lbs.	4.70 @	—
imported, casks	100 lbs.	4.70 @	5.00
Antimony chloride solution (butter of), domestic, carboys	lb.	.17 @	.18
imported, carboys	lb.	.14½@	—
metal, bulk	lb.	.10¾@	—
needle powdered, barrels	lb.	.12 @	—
oxide, barrels	lb.	.12 @	.13
sulphuret, golden, barrels	lb.	.16 @	.20
vermilion, barrels	lb.	.38 @	.42
Argols, crude, 30 p.c., casks	lb.	.07½@	—
80 percent, casks	lb.	.15 @	.15½
Arsenic metal, cases	lb.	.50 @	.55
red, kegs	lb.	.09½@	.10
white, powdered, kegs	lb.	.04 @	.05
Barium carbonate, domestic, bags	ton.	57.50	@60.00
imported, bags	ton.	60.00	@68.50
chloride, crystals, domestic, barrels or bags	ton.	60.00	@70.00
imported, bags	ton.	63.00	@70.00
dioxide, imported, drums	lb.	.12 @	.13
fluoride, barrels	lb.	.12 @	.20
hydrate, barrels		.04½@	—
Bleaching powder, car lots, works, drums	100 lbs.	2.00 @	2.35
less car lots, works, drums,	100 lbs.	2.15 @	2.60
Blue vitriol, 99 p.c., crystals, car lots, barrels	100 lbs.	5.30 @	5.40
less car lots, barrels	100 lbs.	5.85 @	6.00
Brimstone (see sulphur).			
Cadmium sulphide, boxes	lb.	.75 @	.85
Calcium carbide, drums	lb.	.05 @	.06
chloride, flake, domestic, 77 to 80 p.c., bags	100 lbs.	1.94 @	2.09
drums	100 lbs.	1.94 @	2.09
car lots, works	ton.	25.00 @	—
imported, 75 p.c.	ton.	23.00	@24.00
solid, domestic, drums, 73 to 75 p.c.	100 lbs.	1.69 @	1.84
car lots, works, drums,	ton.	20.00 @	—
Calcium chloride, solid, imported shipments, drums	ton.	18.50	@20.00
hydrate, works, bags	ton.	11.50	@12.00
barrels	100 lbs.	.60 @	.85
phosphate, barrels	lb.	.07 @	.08
Carbon bisulphide, drums	lb.	.05 @	.06
dioxide, cylinders	lb.	.06 @	.08
tetrachloride, car lots, dms.	lb.	.06¼@	.06½
less car lots, drums	lb.	.06½@	.07
Chlorine, liquid, car lots, works, cylinders	lb.	.05¾@	—
contracts, cyls	lb.	.06½@	—
less car lots, works, cyls.	lb.	.08¼@	.09¼
contracts, cyls	lb.	.08 @	.09
tanks, works, prompt	lb.	.03¾@	—
contracts, tanks	lb.	.03½@	—
Chloropicrin, commercial, cylinders, works	lb.	1.00 @	1.35
Chrome acetate, 8 p.c. chrome, barrels	lb.	.04¾@	.05¼
Copper, electrolytic	lb.	.14¾@	—
carbonate (see Agricultural Insecticides.)			
chloride, barrels	lb.	.19 @	.25
cyanide, technical, barrels	lb.	.51 @	.52
oxide, black, kegs	lb.	.20 @	.25
sulphate (see blue vitriol).			
Copperas, car lots, works, bags,	ton.	16.00 @	—
barrels	ton.	18.00 @	—
bulk	ton.	13.00 @	—
Diorthotoluolguanidin, drums	lb.	.48 @	.49
Diphenylguanidin, drums	lb.	.40 @	.41
Ethyl acetate, tanks	gal.	.87 @	—
car lots, drums	gal.	.89 @	—
less car lots, drums	gal.	.92 @	—
bromide, technical, drums	lb.	.50 @	.55
Ethylene dichloride, drums	lb.	.07 @	.10
Ferric chloride, crystal, barrels	lb.	.04½@	.07
Fluorspar, domestic, acid grade, lump, car lots, bulk, works	ton.	39.00 @	—
enameler's, 96 to 98 p.c., bags	ton.	37.50	@40.00
ground, car lots, bulk, works	ton.	43.50 @	—
No. 1 standard ground, works	ton.	32.50 @	—
No. 2 lump, works	ton.	18.00 @	—
washed gravel, 85 and 5, bulk, works	ton.	17.00 @	—
ground, bags, works	ton.	31.00	@31.50
imported, 85 and 5, ground, bulk	ton.	17.50 @	—
Formaldehyde anilin, drums	lb.	.31 @	.35½
Glauber's salt, domestic, car lots, bags	100 lbs.	1.00 @	—
less car lots, bags	100 lbs.	1.15 @	1.60
barrels	100 lbs.	1.20 @	1.65
imported	100 lbs.	.70 @	.80
anhydrous, domestic	lb.	.03 @	.03½
foreign	lb.	.02¼@	.02¾
Iron nitrate, com'l, kegs	lb.	.02¾@	.03
true, kegs	lb.	.09 @	.09½
Lead, acetate, brown, broken, barrels	lb.	.12 @	.12½
white, broken, barrels	lb.	.13½@	.14
crystals, barrels	lb.	.13 @	.13½
granular, barrels	lb.	.13½@	.14
powdered	lb.	.14 @	.14½
arsenate (see Agricultural Insecticides.)			
nitrate, barrels	lb.	.13 @	—
sulphate, barrels, works	lb.	.08¼@	—
Lime, lump, works, barrels	bbl.	1.80 @	2.80
bulk	ton.	8.50 @	—
acetate, bags	100 lbs.	4.00 @	—
Magnesite, calcined, barrels	ton.	50.00	@60.00
Magnesium chloride, flake, domestic, works, barrels	ton.	36.00	@37.00
imported, barrels	ton.	31.75	@33.50
carbonate, technical, bags	lb.	.06 @	.06½
silicofluoride, barrels	lb.	.09¾@	.10¼
stearate, barrels	lb.	.22 @	.23
Manganese chloride, imported, barrels		.08 @	.09
dioxide, technical (peroxide), drums	lb.	.04½@	.06
sulphate, works, barrels	lb.	.07¾@	.08½
Methyl chloride, cylinders	lb.	.45 @	.
Nickel chloride, barrels	lb.	.16 @	.19
kegs	lb.	.18 @	.19
oxide, barrels	lb.	.38 @	.40
salts, double, barrels	lb.	.10 @	—
single, bbls	lb.	.10½@	—
Niter cake, works, bulk	ton.	4.50 @	5.50

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Phosphorus oxychloride, cylinders	lb.	.35 @	.40
red, casks	lb.	.55 @	.60
sesquisulphide, cases	lb.	.44 @	—
trichloride, cylinders	lb.	.35 @	—
yellow, casks	lb.	.35 @	.40
Potash bichromate (see Dyestuffs and Tanstuffs.)			
binoxalate, drums	lb.	.14 @	.22
bisulphate, kegs	lb.	.30 @	—
carbonate 98@100 p.c., calcined, imported, shipm't, cks	lb.	.07¾@	.08¼
96@98 p.c., calcined, imported, shipment, casks	lb.	.06¾@	.07¼
80@85 p.c., calcined, imported, casks	lb.	.05¾@	.05¾
hydrated, imported, shipment, casks	lb.	.06 @	.06½
caustic, 88@92 p.c., domestic, works, casks	lb.	.07⅛@	.07⅜
imported, casks	lb.	.07⅜@	.07⅞
flake, 88@92 p.c., domestic, works, casks	100 lbs.	8.05 @	8.30
chlorate, domestic, works, car lots, casks	lb.	.06½@	.07
less than car lots, casks	lb.	.08½@	.09
foreign, car lots, casks	lb.	.07½@	.07¾
chloride, crystals, barrels	lb.	.05¼@	.05½
chromate, kegs	lb.	.27 @	.28
cyanide, cases	lb.	.55 @	.60
metabisulphite, bbls	lb.	.10 @	.12
nitrate (see saltpeter).			
oxalate, barrels	lb.	.16 @	.20
perchlorate, works, casks	lb.	.11 @	.11½
permanganate, tech., casks	lb.	.15 @	.16
prussiate, red, casks	lb.	.38 @	.40
yellow, casks	lb.	.17½@	.18¼
sorts, casks	lb.	.08½@	.09
titanium oxalate, kegs	lb.	.23 @	.25
xanthate, tanks	lb.	.12 @	—
car lots, drums	lb.	.14 @	—
Salt cake, ground, w'k's, bbls.	ton.	21.00	@23.00
bulk	ton.	10.00	@17.00
Saltpeter, crystal, barrels	lb.	.07¼@	.08
granular, barrels	lb.	.06 @	.06¼
powder, barrels	lb.	.07¼@	.07½
Soda, acetate, barrels	lb.	.05½@	.06
ash, dense, 58 p.c., car lots, bags	100 lbs.	1.42½@	—
barrels	100 lbs.	1.60 @	—
less car lots, bags	100 lbs.	2.30 @	2.50
barrels	100 lbs.	2.50 @	2.70
contracts, car lots, works, bags	100 lbs.	1.37½@	—
barrels	100 lbs.	1.55 @	—
bulk, shipment	100 lbs.	1.22½@	—
light, 58 p.c., car lots, bags,	100 lbs.	1.37 @	—
barrels	100 lbs.	1.60 @	—
less car lots, bags	100 lbs.	2.04 @	2.19
barrels	100 lbs.	2.29 @	2.44
contracts, car lots, works, bags	100 lbs.	1.32 @	—
barrels	100 lbs.	1.55 @	—
bulk shipment	100 lbs.	1.15 @	—
bicarbonate, car lots, barrels,	100 lbs.	2.25 @	—
kegs	100 lbs.	2.55 @	—
works, barrels	100 lbs.	2.00 @	—
kegs	100 lbs.	2.25 @	—
bisulphate, works, barrels	ton.	5.00 @	6.00
bulk	ton.	3.50 @	4.50
bisulphite, powdered, works, barrels	100 lbs.	3.75 @	4.25
solution, 35-38 p.c., works, barrels	100 lbs.	1.50 @	1.75
caustic, 60 p.c., contracts, works, drums	100 lbs.	2.50 @	—
76 p.c., flake, car lots, drums	100 lbs.	3.35 @	—
less car lots, drums	100 lbs.	4.16 @	4.31
contracts, car lots, works, drums	100 lbs.	3.30 @	—
ground, car lots, drums	100 lbs.	3.35 @	—
caustic, 76 p.c., ground, less car lots, drums	100 lbs.	4.16 @	4.31
contracts, car lots, works, drums	100 lbs.	3.30 @	—
solid, car lots, drums	100 lbs.	2.95 @	—
less car lots, drums	100 lbs.	3.76 @	3.91
contracts, car lots, works, drums	100 lbs.	2.90 @	—
export, drums	100 lbs.	2.80 @	3.10
chlorate, seaboard, kegs	lb.	.05¾@	.06
works, kegs	lb.	.06¼@	.06½
foreign, ex dock	lb.	.07 @	—
cyanide, 96@98 p.c., domestic, 100-lb. drums	lb.	.18 @	.19
imported, cases	lb	17 @	.18
fluoride, barrels	lb.	.08½@	.10
hydrosulphide, barrels	lb.	.26 @	.28
monohydrate, barrels	100 lbs.	2.60 @	—
works, barrels	100 lbs.	2.30 @	—
naphthionate	lb.	.52 @	.54
nitrate, crude (see Fertilizer Materials.)			
refined, granular, barrels	lb.	.03⅞@	.04½
powder, barrels	lb.	.05¾@	.06
nitrite, 96@98 p.c., domestic, barrels	lb.	.07¼@	.08
imported, casks	lb.	.08½@	.08¾
perborate, barrels	lb.	.18 @	—
phosphate, dibasic, barrels	lb.	.03¼@	.03¾
tribasic, barrels	lb.	.039 @	.04½
prussiate, yellow, works, cks	lb.	.11 @	.12
pyrophosphate, barrels	lb.	.15 @	.24
sal, barrels	100 lbs.	1.15 @	—
works, barrels	100 lbs.	1.00 @	—
silicate, 40 deg., works, drums,	100 lbs.	.70 @	.80
tanks	100 lbs.	.60 @	—
60-deg., works, drums	100 lbs.	1.65 @	—
silicofluoride, barrels	lb.	.05¼@	.05½
stannate, drums	lb.	.39½@	.41
stearate, barrels	lb.	.20 &	.29
sulphide, 30 p.c., crystals, barrels, works	100 lbs.	2.35 @	2.65
foreign	100 lbs.	2.10 @	2.25
60 p.c., broken, casks	100 lbs.	3.25 @	3.75
foreign	100 lbs.	3.25 @	3.50
sulphite, crystals, barrels	lb.	.03 @	.03¼
powdered, barrels	lb.	.06¾@	.07
sulphocyanide, cases	lb.	.29 @	.37
tungstate, tech., cryst., kegs	lb.	.65 @	.78
Sulphur chloride, tanks, works	lb.	.03½@	.04
drums	lb.	.05 @	.07
dioxide, anhydrous, works, tanks	lb.	.04 @	—
car lots, drums	lb.	.04½@	—
cylinders	lb.	.05 @	—
less car lots, cylinders	lb.	.06½@	.08
crude, car lots, mines, bulk	ton.	18.00	@19.00
ex vessel, Atlantic ports, bulk	ton.	22.00	@23.00
roll, bags	100 lbs.	2.25 @	2.70
barrels	100 lbs.	2.40 @	2.85
flour, commercial, bags	100 lbs.	1.55 @	2.10
barrels	100 lbs.	1.90 @	2.45
extra fine, bags	100 lbs.	2.40 @	3.00
superfine, bags	100 lbs.	2.40 @	2.80
barrels	100 lbs.	2.55 @	3.10
rubbermakers', bags	100 lbs.	2.20 @	2.80
barrels	100 lbs.	2.55 @	3.10
refined, extra fine, bags	100 lbs.	2.80 @	3.35
barrels	100 lbs.	3.15 @	3.70
heavy, bags	100 lbs.	2.50 @	3.05
barrels	100 lbs.	2.85 @	3.40
light, bags	100 lbs.	2.60 @	3.15
barrels	100 lbs.	2.95 @	3.50
rubbermakers', bags	100 lbs.	2.60 @	3.15
barrels	100 lbs.	2.95 @	3.50
Tin	lb.	.47 @	—
bichloride, barrels	lb.	.14¾@	—
crystals, barrels	lb.	.37 @	—
oxide, barrels	lb.	.53 @	—
tetrachloride, anhydrous	lb.	.31 @	—
Triphenylguanidin, drums	lb.	.67 @	—
Uranium oxide	lb.	1.50 @	—
Urea, cases	lb.	.20 @	30
Zinc carbonate, barrels	lb.	.10 @	.11
chloride, fused, works, drums,	lb.	.05¼@	.06
granular, domestic, works, drums	lb.	.06½@	.06⅝
solution, works, drums	lb.	.02¾@	.03¼
cyanide, drums	lb.	.40 @	.46
dust, car lots, barrels	lb.	.08¾@	.09
barrels	lb.	.09¾@	.11
fluoride, barrels	lb.	.15 @	.20
Zinc sulphate, barrels	lb.	.03½@	.03¾
sulphide, barrels	lb.	.30 @	.32
ammonium chloride, cks	lb.	.05½@	—
Zirconium oxide, natural, kegs	lb.	.02½@	.03
pure, kegs	lb.	.45 @	.50
semi-refined, kegs	lb.	.08 @	.10

Acids

Acetic, com'l., 28 p.c., barrels,	100 lbs.	3.63 @	3.88
carboys	100 lbs.	4.13 @	4.38
30 p.c., barrels	100 lbs.	4.92 @	5.17
carboys	100 lbs.	5.42 @	5.67
56 p.c., barrels	100 lbs.	6.85 @	7.10
carboys	100 lbs.	7.35 @	7.60
60 p.c., barrels	100 lbs.	7.30 @	7.55
carboys	100 lbs.	7.80 @	8.05
70 p.c., barrels	100 lbs.	8.44 @	8.69
carboys	100 lbs.	8.94 @	9.19
80 p.c., barrels	100 lbs.	9.62 @	9.87
carboys	100 lbs.	10.12	@10.37
84 p.c., barrels	100 lbs.	10.18	@10.33
carboys	100 lbs.	10.58	@10.83
glacial, U.S.P., 99 p.c., barrels	100 lbs.	12.79	@13.04
carboys	100 lbs.	13.30	@13.55
pure, 60 p.c., barrels	100 lbs.	8.65 @	8.90
carboys	100 lbs.	9.15 @	9.40
80 p.c., barrels	100 lbs.	11.41	@11.66
carboys	100 lbs.	11.91	@12.16
redistilled, 28 p.c., barrels,	100 lbs.	3.91 @	4.16
carboys	100 lbs.	4.41 @	4.66
56 p.c., barrels	100 lbs.	7.40 @	7.65
carboys	100 lbs.	7.90 @	8.15
60 p.c., barrels	100 lbs.	7.90 @	8.15
carboys	100 lbs.	8.40 @	8.65
70 p.c., barrels	100 lbs.	9.14 @	9.39
carboys	100 lbs.	9.64 @	9.89
80 p.c., barrels	100 lbs.	10.41	@10.66
carboys	100 lbs.	10.91	@11.16
Acetic anhydride, drums	lb.	.28 @	.29
Battery, carboys	100 lbs.	1.60 @	3.00
Benzoic (see Coaltar Products).			
Boric, 99½ p.c., car lots, sacks,	lb.	.06½@	.07
car lots, barrels	lb.	.07¼@	.08¼
5 tons, sacks	lb.	.08¼@	—
barrels	lb.	.08½@	—
less than 5 tons, sacks	lb.	.07¾@	.08½
barrels	lb.	.08 @	.08¾
kegs	lb.	.08½@	—
Butyric, 100 p.c. basis, cbys	lb.	.85 @	.90
Camphoric, cans	lb.	4.85 @	—
Carbolic (see Coaltar Products-phenol).			
Chromic, 99 p.c., drums extra	lb.	.20 @	.21
Cinnamic, refined, bottles	lb.	3.25 @	3.50
Citric, domestic, crystals, barrels	lb.	.46 @	—
powder, barrels	lb.	.47 @	—
imported, kegs	lb.	.59 @	.60
Cresylic (see Coaltar Products).			
Formic, 90 p.c., imported, carboys	lb.	.11 @	.12
Gallic, technical, barrels	lb.	.50 @	.55
U.S.P., barrels	lb.	.74 @	—
Hydriodic, U.S.P., 10 p.c. solution, carboys	lb.	.67 @	—
Hydrobromic, U.S.P., 10 p.c. solution, carboys	lb.	.19 @	—
Hydrochloric (see muriatic).			
Hydrocyanic, works, cylinders	lb.	.80 @	1.00
Hydrofluoric, 30 p.c., barrels	lb.	.06 @	.06¼
lead carboys	lb.	.08 @	.08½
48 p.c., lead carboys	lb.	.10 @	.10½
52 p.c., lead carboys	lb.	.11 @	.11½
60 p.c., lead carboys	lb.	.13 @	.13½
Hydrofluosilicic, 35 p.c., barrels,	lb.	.11 @	.12
Hypophosphorus, 30 p.c., U.S.P., demijohns	lb.	.85 @	—
Lactic, 22 p.c., dark, barrels	lb.	.04¾@	.05¼
light, barrels	lb.	.05¾@	.06¼
44 p.c., dark, barrels	lb.	.10 @	.10½
light, refined, barrels	lb.	.12 @	.12½
U.S.P., X, carboys	lb.	.62 @	.64
Malic, powd., kegs	lb.	.48 @	.60
Mixed, tanks, nitric unit	lb.	.07 @	.07¼
sulphuric unit	lb.	.008 @	.01
Monochloracetic, technical, barrels	lb.	.18 @	.21
99 p.c., barrels	lb.	.25 @	.27
Muriatic, 18 deg., tanks, works,	100 lbs.	1.00 @	—
carboys, car lots, works	100 lbs.	1.35 @	—
truckloads, del'd	100 lbs.	1.60 @	—
20 deg., tanks, works	100 lbs.	1.10 @	—
carboys, car lots, works	100 lbs.	1.45 @	—
truckloads, del'd	100 lbs.	1.70 @	—
22 deg., tanks, works	100 lbs.	1.60 @	—
carboys, car lots, works	100 lbs.	1.95 @	—
truckloads, del'd	100 lbs.	2.20 @	—
chemically pure, carboys	lb.	.07 @	—
5-pt. bottles	lb.	.09 @	—
Nitric, 36 deg., carboys, car lots, works	100 lbs.	5.00 @	—
carboys, truck lots, del'd	100 lbs.	5.25 @	—
38 deg., carboys, car lots, works	100 lbs.	5.50 @	—
truckloads, del'd	100 lbs.	5.75 @	—
40 deg., carboys, car lots, works	100 lbs.	6.00 @	—
40 deg., carboys, truck loads, del'd	100 lbs.	6.25 @	—
	100 lbs.	6.50 @	—
42 deg., carboys, car lots, works, truckloads, del'd	100 lbs.	6.75 @	—
chemically pure, carboys	lb.	.12 @	—
5-pt. bottles	lb.	.14 @	—
Oleic (see Miscellaneous Oils—red oil).			
Oleum (see fuming sulphuric).			
Oxalic, domestic, barrels	lb.	.11 @	.11¼
imported, barrels	lb.	.11⅞@	.12⅛
Picric (see Coaltar Products).			
Phosphoric, 50 p.c., technical, carboys, barrels	lb.	.08½@	.09
85 p.c., syrupy, U.S.P. (spec. grav. 1.710), carboys	lb.	.14 @	.15
89 p.c. (spec. grav. 1.750), carboys	lb.	.15 @	.16
Phthalic anhydride (see Coaltar Products).			
Pyrogallic, crystals, cans	lb.	1.30 @	1.40
resublimed, cans	lb.	1.60 @	1.70
Stearic (see Miscellaneous Oils).			
Salicylic (see Coaltar Products).			
Sulphuric, 60 deg., tanks, works,	ton.	11.00 @	—
66 deg., tanks, works	ton.	15.50 @	—
carboys, car lots, works	100 lbs.	1.35 @	—
truckloads, del'd	100 lbs.	1.60 @	—
98 percent, tanks, works	ton.	16.50 @	—
chemically pure, carboys	lb.	.07 @	—
5-pt. bottles	lb.	.09 @	—
fuming (oleum), 20 percent, tanks, works	ton.	18.50 @	—
Tannic, technical, barrels	lb.	.35 @	.40
U.S.P., fluffy, barrels	lb.	.87 @	.93
Tartaric, U.S.P., domestic, crystals or powder, barrels	lb.	.38 @	—
fiber, drums	lb.	.39 @	—
kegs	lb.	.38½@	—
imported, crystals, kegs	lb.	.38 @	—
Trichloracetic, bottles	lb.	2.75 @	—
kegs	lb.	2.00 @	—
Tungstic, barrels	lb.	1.00 @	1.25

Insecticides, Fungicides

Arsenic, white, powder (see above).			
Bordeaux mixture, paste, bbls.	lb.	.10½@	.11½
powder, barrels	lb.	.10½@	.11½
Calcium arsenate, drums	lb.	.06 @	.07
Carbon bisulphide (see above).			
Copper carbonate, barrels	lb.	.17 @	.17½
Formaldehyde (see Drugs and Fine Chemicals).			
Lead arsenate, powder, drums	lb.	.13½@	.15
Lime-sulphur solution, barrels,	gal.	.15 @	.16
Nicotine, 95 p.c., tins	lb.	3.25 @	—
sulphate, 10-lb. tins	tin	9.85 @	—
Paradichlorobenzene, kegs	lb.	.17 @	.25
Paris green, bulk	lb.	.23 @	.35
Soda, arsenate, drums	lb.	.18 @	.19
arsenite, drums	gal.	1.00 @	1.50

Osmiridium is reported to have been discovered in the Valley of Rasselas, Gordon River, Tasmania.

The Dominican Republic has increased its import surtax from 5 percent of the duty to 15 percent.

J. Wrench, sales manager for the Industrial Chemical Sales Company, this city, returned on the "Scythia," September 8, from an extensive tour of Europe.

Lord Melchett (formerly Sir Alfred Mond) and Sir Harry McGowan, of Imperial Chemical Industries, will sail for New York September 10 on the steamship "Homeric."

Robert J. Quinn, assistant manager of sales for the Mathieson Alkali Works, Inc., is back at his desk after a Western trip in which he combined business with pleasure.

Sodium chlorate is reported by the United States Bureau of Plant Industry to be quite effective for eradicating the wild currants which are a troublesome carrier of blister rust in the Northwest.

Rights in processes for producing catalytically active alloys of magnesium have been acquired by the Interessen Gemeinschaft Farbenindustrie from the Aluminium und Magnesium Fabrik A. G.

The Industrial Rayon Corporation, Cleveland, has filed a complaint with the Interstate Commerce Commission seeking lower freight rates on shipments of carbon bisulphide to Cleveland from Midland, Mich. The complaint states that carbon bisulphide takes fourth class rates while other acids are given fifth class or sixth class rates.

T. G. Cooper & Co., chemicals and oils, 47 North Second street, Philadelphia, has added a number of new lines. The company says that reports that it is about to liquidate are without foundation.

Edward R. Weidlein, director of Mellon Institute of Industrial Research, and president of the American Institute of Chemical Engineers, has been elected an honorary member of the British Institution of Chemical Engineers.

Officers of the Virginia section of the American Chemical Society have been elected as follows:—Chairman, R. F. McCrackan; vice chairman, L. C. Bird; secretary-treasurer, W. J. Nissley; councillors, H. K. McConnell and J. W. Watson.

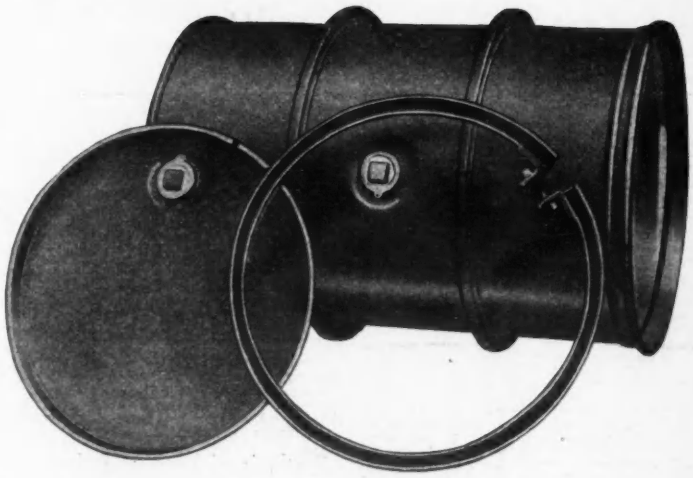
The Societe Industrielle de Produits Chimiques de Bozel-Maletra has absorbed the Manufactures Chimiques de Mennessis & Corbie (muriatic and sulphuric acids) and the Compagnie Francaise du Silicate Pourles Routes (soda silicate).

The Tariffville Oxygen Chemical Company, Tariffville, Conn., has been sold to the International Oxygen Co. of Newark, N. J. Frank Soule, assistant treasurer of the Tariffville company, will be manager of the Tariffville branch for the new owner.

The Southern Agricultural Chemical Corporation, Atlanta, has filed a complaint with the Interstate Commerce Commission seeking lower freight rates on tank car shipments of sulphuric acid from Cooperhill, Tenn., to Montgomery, Ala., and destinations in North Carolina, South Carolina and Virginia.

The duty on cream of tartar imported into the union of South Africa has been raised from 3 pence to 4 pence per pound or 30 percent ad valorem (whichever is the higher). The duty on aluminum biphosphate, sodium biphosphate, and calcium biphosphate has been raised to 3 pence per pound or 30 percent (whichever is the higher).

Representations have been made to the British Board of Trade looking to the exemption from import duty of the following articles:—Butyl chloral hydrate, celtium oxide, dysprosium oxide, erbium oxide, europium oxide, gadolinium oxide, holmium oxide, lutecium oxide, samarium oxide, terbium oxide, thulium oxide, and ytterbium oxide.



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American Chemical Society Meeting

(Continued from page 40D)

of the total appears on the market as high-grade potassium chloride. Of the remaining 15 percent the major portion appears as a chloride-sulphate-carbonate mixture which, because of its chloride content, fails to gain credit for its sulphate content. It may, therefore, be said that of the American product none is marketed as sulphate. While potash prospects under consideration and actual exploitation offer the ultimate prospect of adequate supplies of sulphate, there is at present a marked deficiency in this preferred form of potash which operates to continue our state of dependence on foreign sources of this agricultural essential. Accordingly the work here summarzed was undertaken to test the chemical and economic feasibility of converting chloride to sulphate.

Of various procedures devised and tested, the most convenient appears to be the intermixture of potassium chloride with the stoichiometric quantity of chamber acid to yield the normal sulphate. Where the acid is added to the salt with vigorous stirring, there results an evolution of one-half of the hydrochloric acid and a dry, granular solid which, if then heated to a temperature of 250-500° C., yields the second half of the hydrochloric acid and the normal potassium sulphate still in the granular state. A conversion of 95 percent is readily attained, depending on time of heating.

Costs have not been determined for the manufacturing scale of operations, but the spread between raw materials and finished products is such as to indicate that the hydrochloric acid is yielded at a zero production cost. The method should therefore find application in those plants where considerable quantities of hydrochloric acid are now consumed. The utilization of such by-product hydrochloric acid in the fertilizer industry for the decomposition of phosphate rock was discussed. In either case facilities are offered for contributions to domestic supplies of potassium sulphate.

In the discussion of this paper a new German plan to produce potassium sulphate cheaply from the combination soda-potash-magnesia brine was described. This process will shortly be put to commercial application. It was declared that the Germans sought to get a new basis (the sulphate) for the determining of potash prices.

Preparation of Potassium Nitrate

Arnon L. Mehring, William H. Ross and Albert R. Merz

The use of potassium nitrate as a fertilizer was discussed and a review was given of methods for its preparation by leaching of soil and decayed organic matter, by double decomposition reactions, and by crystallization from Chilean nitrate. Results were outlined of an investigation on the preparation of potassium nitrate from potassium chloride and nitrogen peroxide. In the operation of the most promising of the procedures studied a stream of nitrogen peroxide is passed counter-currently over a potassium chloride solution in absorbing towers to form a solution of potassium in strong nitric acid with the evolution of hydrogen chloride. The resulting solution is then digested at the boiling point under a reflux condenser with solid potassium chloride, cooled to crystallize out potassium nitrate and the mother liquor returned to the system for use again in the process. The gas evolved in the reaction consists of a mixture of chlorine and nitrosyl chloride. The nitrogen in the latter is recovered by absorption in concentrated sulphuric acid for return to the absorbing system. The products of the reaction are thus potassium nitrate, chlorine and hydrochloric acid.

Composite fertilizer also came in for attention in the following and other papers:—

Absorption of Nitrogen Oxides by Distillery Waste Potash

V. N. Morris

Distillery waste potash, the product resulting on the incineration of the non-volatile residues from fermented cane molasses, is essentially a mixture of the sulphate, chloride, and carbonate of potassium. The current production at the Baltimore plant of the U. S. Industrial Chemical Company is at the rate of about 12,000 tons per annum. Being plant ash, it should find a preferred market as fertilizer potash. Until such is realized it constitutes a cheap source of potassium carbonate for the absorption of oxides of nitrogen. Accordingly, with a view to the enhancement of its market value, distillery waste potash was tested as an absorbent for oxides of nitrogen to determine the readiness with which a nitrated product could be produced therefrom. It was observed that whether in solution or in solid form, it was easily and efficiently converted into a potash-nitrate mixture of chemical and physical characteristics apparently entirely favorable to its use in fertilizer manufacture.

Oxides of Nitrogen in the Preparation of Phosphate-Nitrate Fertilizer Mixtures

V. N. Morris

It having been shown that phosphate rock is readily attacked by nitrogen oxides with practically quantitative absorption of the oxides, attention has been given to the nature of the products obtained, particularly as to their physical properties and suitability for marketing as fertilizer ingredients. The immediate products of this interaction are calcium nitrate and monocalcium phosphate with their equilibria concentrations of ntiric and phosphoric acids. To utilize this mixture it is necessary first to neutralize the excess acid and it is further desirable to form solids or mixtures of solids of such a nature as to overcome the natural hygroscopicity of the calcium nitrate. Accordingly, neutralizing agents were sought which would both neutralize the free acids, convert the monocalcium to the dicalcium phosphate, in part at least, and at the same time contribute to the fertilizer or plant food value of the product and not become a diluent.

As probably answering this purpose, ammonia and distillery waste potash (potassium carbonate-sulphate-chloride) were chosen. With ammonia there were obtained products containing 33 percent available and 0.4 percent citrate-insoluble phosphoric acid in the solid phase. When the total product was reduced to a solid, the resulting mixtures were found to contain 11 percent nitrogen (of which 5 percent was ammonia nitrogen and 6 percent nitrate nitrogen) and 22 percent phosphoric acid (of which 4 percent was citrate-insoluble). With distillery waste potash, precipitates were obtained containing 22 percent total and 20 percent available phosphoric acid; and the mixture obtained by the evaporation of the solution in the presence of the solids contained 9 percent nitrogen, 21 percent potash (K_2O) and 15 percent available phosphoric acid. The choice is afforded of a variety of procedures yielding products of a variety of compositions and physical properties. Stable mixtures of moderate or negligible hygroscopicity are easily obtainable. Hygroscopicity of the less favorable mixtures can be greatly reduced by a brief exposure of the granular solids to a dilute atmosphere of gaseous ammonia, thereby developing a protective coating of non-hygroscopic compounds.

Synthetic Ammonia in the Fertilizer Industry

J. W. Turrentine

Since synthetic ammonia at present plays only a negligible role in the American fertilizer industry, the subject must be discussed from the viewpoint of future developments. What these are to be may be forecast either from a study of present American conditions and trends within the industry or by reciting present European practices. Synthetic ammonia is now available to the industry as a chemical reagent for use in the preparation of other than nitrogenous fertilizer compounds, as a non-valueless carrier of other fertilizer elements, and as a source of nitrogen for the fabrication of a number of diversified forms of plant-food nitrogen. While many practical details of these applications yet remain to be determined, enough is already established to warrant entire confidence in these prospective developments as being capable of promoting increased economy in both manufacture and distribution, with improved fertilizer excellence and enhanced national independence with respect to fertilizer raw materials. (See also nitrogen symposium.)

Ammonium Phosphates

William H. Ross, Albert R. Merz and K. D. Jacob

The most concentrated fertilizer materials obtainable are salts in which both the acid and basic radicals contain the essential fertilizer elements. The ammonium phosphates form an important group of such concentrated fertilizer compounds. They form three series of salts, the meta-, pyro-, and orthophosphates of ammonium. Methods for their preparation were described and their properties outlined, particular attention being paid to those compounds which give promise of extensive utilization in commercial concentrated fertilizers.

Concentrated Fertilizers

A. B. Beaumont

Sufficiently extensive tests of concentrated fertilizers have now been made to prove that such materials can successfully compete with the low-, and medium-analysis materials of more common usage. Concentrated fertilizers have brought problems for the chemist and agronomist, which are not unlike many of the problems that arise with the lower-analysis goods. Aside from the question of "burning," one of the principal problems that has arisen is that of the deficiency in the concentrated and usually purer materials of certain elements necessary for plant growth but not ordinarily considered plant food, such elements as magnesium, boron, manganese. Such deficiencies, however, have also been noted in the use of ordinary low-, and medium-analysis fertilizers. Another problem of importance is that of the proportion of organic matter in the fertilizer. This is related to the soil and climatic conditions under which the fertilizer is used. There are also problems of physical and chemical condition of materials, which affects storage and drillability. The possibilities of synthesis of both inorganic and organic materials challenge the best efforts of the chemist. The agronomist is confronted also with many problems arising with the use of the new materials, and there is need of a close co-operative alliance between the chemist and agronomist in this inviting field of research.

Methods for the analysis of concentrated fertilizer mixtures were discussed by A. B. Beaumont and H. R. Knudsen. The newly developed fertilizer triangle for the simple stating of analyses was discussed by F. E. Bear.

Gas and Fuel Division

In addition to participating in the two-day symposium on combustion hereinbefore referred to, the division of gas and fuel chemistry had one session. Among the papers presented were the following:

Synthesis of Higher Hydrocarbons

D. F. Smith, C. O. Hawk, and D. A. Reynolds

The authors described the composition and method of preparation of a catalyst which at 200 deg. C. and a space velocity of 230 will convert 18 percent of the water gas passed over it into hydrocarbons. The amounts and nature of the hydrocarbons formed under different conditions of temperature and space velocity and the amounts of water gas converted in the process were reported. The effect of temperature and space velocity on the molecular weight of the hydrocarbon products produced and upon their unsaturation was shown.

Tar from Low Temperature

R. L. Brown and R. N. Pollock

The heavy portions of the tar obtained from Mesa Verde coal (Utah) when the latter is carbonized with steam superheated to about 700 deg. C. was examined. The tar was collected in two parts, one (tar II) lighter than the aqueous condensate and the other (tar III) heavier than water. Tar II was 40 percent of the total tar and consisted of insoluble matter, 0.85 percent.; carboxylic acids, 2.25 percent.; alkali soluble (phenolic), 15 percent; tar bases, 1.55 percent, and neutral portion, 80 percent. This neutral portion consisted of 18.5 parts of resin, 24.1 parts of wax, and 57.3 parts of oil. Tar III amounted to 30.8 percent of the total tar and was made up of 9.5 percent insoluble (in ether) matter, 2.5 percent of carboxylic acids, 40 percent of alkali-soluble (phenolic), 3 percent of tar bases, and 45 percent of neutral portion consisting of 69 parts of oil, 10 of wax, and 20 of resinous matter. The composite total tar contained 3.5 percent of insoluble material (dust, coal, coke, etc.), 2.15 percent carboxylic acids, 26.9 percent phenolic material, 2.1 percent tar bases, and 63.3 percent neutral portion (working loss 2.2) made up as follows:—9.4 resin, wax 10.8, and oil 42.8. The oil was approximately 50 percent unsaturated, 22 percent naphthenic, 16 percent aromatic, and 11 percent paraffin hydrocarbons.

Industrial and Engineering Division

Two symposiums were particular features of the sessions of the division of industrial and engineering chemistry. One of these was concerned with the economic status of nitrogen and is reported in an earlier part of this account of the Swampscott meeting. The otner had to do with carrosion. In addition, the division had a joint general session with the division of organic chemistry, which is also reported in a preceding column. The subject of corrosion was discussed from the phenomena side rather than with respect to preventive coatings, although the influence of inhibitors was touched upon.

Other parts of the program included the following papers:

Methanol Synthesis

Studies in the catalytic phases of the synthesis of methanol were presented in two papers from the department of chemical engineering, Massachusetts Institute of Technology. In summary, these studies were as follows:—

An investigation was made of the synthesis of methanol with catalysts composed of copper and zinc oxide. The composition of this binary catalyst system has been varied between the limits of 0 and 100 mol percent of each constituent. A comparison of the results with data previously obtained on the decomposition of methanol with the same catalysts, shows that the decomposition method is eminently fitted for testing the activity of catalysts for the methanol synthesis from water-gas at high pressure.

In continuing the study of the fundamental nature of the metallic oxide catalysts employed in high pressure synthesis of alcohols and other organic products from water-gas, an x-ray investigation was made of the copper-zinc oxide catalysts previously studied. The results point to a definite relation between the specific catalytic effect and the distance between the atoms of the two components, as is brought out by comparison of data obtained for various ratios of copper to zinc oxide. Zinc oxide, ordinarily considered a non-reducible compound, is undoubtedly partly reduced in the presence of copper oxide. It is not possible to decide, however, whether this reduction proceeds down to elementary zinc, although the indications are that this is the case. Over the whole range the structure of the catalyst mixtures is decidedly crystalline.

Urea Synthesis

H. J. Krase

The Fixed Nitrogen Research Laboratory has developed a method for separating ammonia and carbon dioxide and for purifying gases for synthetic ammonia and urea production. The chemistry of the urea reaction was discussed and the effect of water and urea on the carbamatedehydration reaction indicated. The effect of excess ammonia on the reaction was indicated, as was also the practical application of the discovery.

Drying of Solids

T. K. Sherwood

The possible ways in which the drying of a solid takes place were classified under four cases. Evaporation of water may take place at the solid surface or at points within the solid structure, and under each heading the possibilities occur of the resistance to internal liquid diffusion being great or small as compared with the total resistance to removal of vapor. The drying of a particular material is not necessarily restricted to one case, as the mechanism may change from one case to another as the drying proceeds. The case of drying by internal diffusion of liquid to the surface, with negligible resistance to the removal of varor was discussed in detail. The Fourier equations of heat conduction in solids were shown to apply to the drying of solid slabs by this mechanism, and a method was described by which the equations may be used in the analysis of drying data without tedious calculation or an intimate knowledge of the mathematics involved. The theoretical drying equation was shown to fit the data well for cases of the drying of wood and of clay, and to approximate the results obtained in the drying of soap. The diffusion constant of water in soap changes with the moisture content of the soap. This explains the deviation of the actual from the theoretical curve. Data obtained on moisture gradients in soap during drying illustrate the same point.

Leather and Gelatin Division

Three sessions were held by the division of leather and gelatin chemistry in addition to its participation in the joint symposium on polymerization previously reported herein. Both of the division's interests were well covered in the program. Two papers of interest to the gelatin or glue manufacturer were the following.—

Standard Gelatin

J. Harold Hudson and S. E. Sheppard

It was recommended that the first "standard gelatin" prepared should be for scientific purposes: that is, it should be as near as possible a definite chemical compound, with physical properties equal to, or better than, the highest grade gelatin now obtainable. The question of its suitability for photographic or other industrial uses should not enter into the question of its merits, as standards for a special purpose material can be prepared later. Preferably the "standard gelatin" should be prepared from well-limed calfskin, and only the first extract taken. The finished product should contain not more than 0.05 percent ash and be at its isoelectric point of pH 4.7. More definite specifications for a "standard gelatin" should be decided upon only after several laboratories have completely tested a "purified" gelatin.

Concentration and Jelly Strength

M. Briefer and Joseph H. Cohen

A study of relative jelly strengths of chilled gelatin-water mixtures at varying gelatin concentrations was shown by means of curves. This showed that at a certain minimum concentration the jelly strengths are proportional to the concentration. Below this minimum the jelly strengths are not proportional. The characteristic curves of gelatins of different initial jelly strengths are the same as to general form but vary as to the slope of the tangent. The approximately relative values of gelatins of different initial jelly strengths may be computed from the angle formed at the intersection of the projection of the straight line portion of the curve, with the abscissa. Suggestions were given for the estimation of gelatin values of concentrations below the straight line portion of the curve.

Paint and Varnish Division

The division of paint and varnish chemistry had remarkably well attended sessions. These were held at the Deer Cove Inn, located some distance from the headquarters hotel. Three regular sessions were held and there was a dinner with the New England Paint and Varnish Production Club on Tuesday evening.

The seventeen papers on this division's scheduled program were as follows:—

Additive Quality of Oil Absorption

J. T. Baldwin

Determinations of the oil absorption of pigment mixtures show that in general oil absorption is additive. The graph of oil absorption against pigment percentages in a mixture of pigments is a straight line. A slight exception to this is found in mixtures containing active pigments, such as red lead or zinc oxide. If oil absorption is additive, oil absorption is dependent essentially on the specfic surface of the pigment and the interfacial tension or affinity between the pigment and the oil.

Bodied Linseed Oils

W. L. Taylor and W. H. Eastman

Charts were shown of the results of various blowings and boilings of linseed oil. Contrary to the usual relation between specific gravity and refractive index in the untreated oils of the acetic acid series, these two constants increase as drying oils are bodied. It cannot be assumed, however, that the increments will be the same when the oils are bodied under different conditions. From the refractive index and the specified gravity can be determined the manner in which an oil was boded and what viscosity it will have. In general there is a close relation between the viscosities and refractive indices of oils. Under the particular conditions of blowing or boiling, the refractive index is a very significant constant and because of the speed and accuracy with which it may be taken, it suggests a valuable means of control.

Effect of Driers Concentrations on Linseed Oil Films During Ageing

Paul E. Marling and William L. Evans

This paper gave tables showing the changes in acid value and iodine number of linseed oil films when low, medium and high concentrations of lead, cobalt or manganese are incorporated into the film. Ageing tests were made over a period of several months by roof exposure, mercury arc light, electric oven and indrect sunlight. Some observations were made on the solubility of the different films.

Effect of Indirect Sunlight Exposure

Paul E. Marling

Linseed, perilla, soya bean, fish and tung oil films were examined during a period of four years. A comparison was made with reference to the gain and loss in weight of the films during this period. Observations were given concerning the conditions of the films.

Critical Temperature of Drying Oils

D. S. Chamberlin, P. F. Schlingman and J. S. Long

Linseed, perilla, soya bean, poppy seed and chinawood oils and the mixed fatty acids of linseed oil were heated separately in sealed pyrex capillary tubes and the critical temperature directly determined in each case. In order to test these values, the surface tension of these oils was determined with a modified Du Nouy tensiometer, which was described, and these data, together with the density and molecular weight, used to evaluate the constant K of the Ramsey & Shields modification of the Eotvos equation.

Fumes From Oil Kettles

D. S. Chamberlin, E. R. Theis and J. S. Long

Linseed oil was destructively distilled. The condensed vapors were weighed and tested; the uncondensed gas was measured and analyzed. It was observed that the condensed liquid wetted the fumes and retained them. A series of runs was therefore made, in which linseed oil was used as a tower liquid to absorb linseed oil fumes. Changes in idoine number, acid value and saponification value were determined. The fumes were absorbed and retained by lumps of extracted linseed oil gel. They were also successfully burned.

Oxidation of Esters of Betaeleostearic Acid

A. B. Miller and K. L. Rohrbach

This paper treated of the phenomena accompanying atmospheric oxidation of the "non-drying" monohydric alcohol esters of betaeleostearic acid. The normal and isopropyl, normal butyl and benzyl esters of betaeleostearic acid were prepared and the course of their atmospheric oxidation, as well as end products, were studied. The relation of hydrolysis to gelatin was observed and also the effect on the oxidation of the methyl ester of the addition of betaeleostearic acid and stearic acid. The "non-drying" property of these esters was attributed largely to their slight tendency to hydrolyze during oxidation, thus liberating the active betaeleostearic acid.

Action of Organic Solvents on Shellac

William Howlett Gardner and Willet F. Whitmore

A qualitative study of the solubility of shellac in seventy-seven organic solvents was made. This work clearly shows that the solution of shellac in these solvents is not simply a physical phenomenon, but that colloidal aspects are unmistakably present. Unquestionably there is a close connection between solubility on the one hand and the chemical relationship between solvent and solute; and shellac seems to be most soluble in those solvents which approximate it in compostion and structure. Some of the N-bases are good solvents, but the solvent action in this case seems to be a function of the basicity of the solvent rather than any chemical relationship between the dispersed phase and dispersion medium. Inasmuch as shellac is decidedly acidic, the latter observation is quite reasonable.

New Group of Lacquer Solvents

J. H. James

This paper described the preparation, by catalytic oxidation of petroleum fractions, of

mixtures of oxidation products which can be isolated and serve as nitrocellulose and gum solvents. Flow sheets showing the yields from certain petroleum fractions were given, together with the more important properties of these solvents.

Alkyd Resins as Film-Forming Materials

R. H. Kienle and C. S. Ferguson

The use of alkyd resins as film-forming materials was discussed. Differentiation was made between two general types of alkyd resins, namely, heat-convertible and oxygen-convertible. The preparation of satisfactory solutions of both these types of alkyd resins was described. The properties of the resultant films were discussed. It was shown in the case of the oxygen-convertible resins that they merit serious consideration as film-forming materials owing to their possession of both the quick-drying characteristics of nitrocellulose lacquers and the film-building properties of oil base varnishes.

Characteristics of the Synthetic Resins

D. L. Gamble and G. F. A. Stutz

Synthetic resins and natural gums may, in general, be classified according to their ultra-violet light absorption characteristics in the following manner:—

1. Relatively opaque resins:—
(a) Not affected upon exposure to ultra-violet light.
(b) Becomes more opaque upon exposure to ultra-violet light with decomposition of the resin.
2. Relatively transparent resins:—
(a) Not affected upon exposure to ultra-violet light.
(b) Becomes opaque upon exposure to ultra-violet light, with decomposition of the resin.

Ultra-violet light has a marked deteriorating effect upon both oleoresinous and nitrocellulose films. Ultra-violet light also tends to decompose most of the resins and gums, this decomposition being accompanied by a yellowing of the material and an increase in its absorption of ultra-violet light. Therefore 1-a should be the most desirable type of resin for use in protective coatings as regards transmission characteristics because of the protection afforded the rest of the film and its tendency to retain its other desirable properties; 2-a would be a good type, 1-b fair, and 2-b the least desirable.

The ultra-violet absorption characteristics of a number of synthetic resins of the various types had been determined and the resins classified according to the above classification. Transmission measurements were made on both the unexposed resin and after exposure to ultra-violet light for forty-eight hours. The degree of yellowing accompanying exposure to ultra-violet light had been also determined. These data, correlated with the results of actual exposure tests, should give indications as to the ultra-violet absorption characteristics most desirable in a resin.

Light Sources for Accelerated Weathering

F. C. Schmutz and D. L. Gamble

Variations in the comparative darkening tendencies of certain light-sensitive lithopones were observed under (1) carbon arcs (using variously impregnated carbons), (2) the mercury arc, and (3) sunlight, as a possible cue for developing a more satisfactory light source for use in the accelerated weathering system. Since the far ultra-violet was found to produce darkening results most at variance with sunlight, the mercury arc enclosed in glass light filters was tried in the accelerated system and the change in the type of paint failure noted. The light action of the carbon arc was found to be relatively slow except when run at high amperages. Because of excessive heat generation at such high current concentrations, from a mechanical viewpoint, the mercury arc continues to be the more desirable. Data were presented to show how a mercury arc, with a vitrified quartz tube, can be stabilized through a wattage control scheme, to maintain a reasonably constant intensity during service for use in an accelerated weathering system.

The development of a simplified automatic lighting arc has made possible the development of an accelerated test system wherein the whole weathering procedure can be carried on in one apparatus without any manual handling of the test surfaces.

In a paper on "Change of Apparent Fluidity with Apparent Rate of Shear as a Measure of the Brushing and Flowing Properties of Paints," R. V. Williamson, G. D. Patterson, and J. K. Hunt presented graphs to show that the properties under discussion can be clearly shown by plotting apparent fluidity against rate of shear.

At the dinner with the New England Production Club, Frank C. Whitmore, of Northwestern University, discussed the value and the evaluation of research. He stressed the necessity for basing a research program on rational thought, and urged research men to become research-minded. Experimentation without a purpose determined to be practicable he held to be unwise and futile. The answer to be sought by tests should be worth while, he declared, to justify the time and expense. More thinking and, perhaps, less action seemed to him most desirable in research. The research man should think ahead, he said—the farther the better in the light of new competitive developments.

L. A. Jordan, director of research for the British paint and varnish manufacturers' organization, told of the genesis and the progress of the work begun in England about two years ago. The problems brought to the bureau, he said, make it seem that the popular conception of research is that it has some such function as a complaint department. Mr. Jordan spoke interestingly of the attitude of the British manufacturer toward research, and expressed the belief that a better understanding was growing, which would greatly advance the possibilities for efficient service. So far, he said, the problems to be solved had been largely those of physico-chemical nature having to do with the appearance and permanence of the finished product.

Mr. Jordan offered the good wishes of the British Association of Oil and Colour Chemists and related interestingly some of his experiences since coming to the United States some weeks ago. The good wishes were accepted and reciprocally expressed by W. T. Pearce, chairman of the division, who was toastmaster at the dinner. Eighty persons attended.

The division elected the following officers:—Chairman, P. E. Marling; vice-chairman, J. S. Long; secretary-treasurer, E. W. Boughton; members of the executive committee, C. H. Bryce and J. B. Davis.

Petroleum Division

Sixteen papers were presented at the sessions of the division of petroleum chemistry apart from those held in connection with the division of gas and fuel chemistry as a symposium on combustion. The separate sessions were presided over by J. Bennett Hill, chairman of the division. The petroleum division also had a business-free dinner at Marblehead Wednesday evening, which was attended by forty members.

Among the papers heard by the division were the following:—

Surface Effects on Oil Oxidation

Charles Van Brunt and Arthur J. Sherburne

A closed system was described, in which oils may be oxidized in contact with glass and metals, and quantitative data on the rate of oxidation and on the water, acid, carbon dioxide, and sludge found, may be obtained. A study of the effect of the extent of various surface exposures relative to volume of oil on oxidation rate was made, including oil-air, oil-glass, and other presumably catalytic surfaces. Very variable results had thus far been obtained which tend at least to indicate the presence in all laboratory tests of a factor or factors, the importance of which has not been adequately recognized.

Amorphous Wax Characteristics

L. D. Jones and E. E. Blachly

The various differences between crystalline wax and amorphous wax were described, and also the various conditions whereby wax is precipitated in a crystalline or amorphous state. A surface tension and colloidal theory was proposed to account for the occurrence of amorphous wax.

Petroleum Vaporization Data

E. H. Leslie and G. H. Fancher

The equilibrium single-flash vaporization of a typical Midcontinent petrolum, a heavy California petroleum, a shell-still pressure distillate, and a Dubbs process pressure distillate was studied. Data were presented showing the percentage of each material vaporized at a series of temperatures and the boiling range-specific gravity of the vaporized and unvaporized portions at each temperature together with the A.S.T.M. distillation characteristics of the gasoline content of the various fractions.

X-Ray Studies of Paraffin

George L. Clark

1. Detailed x-ray diffraction data on the normal aliphatic hydrocarbons in paraffin in both the solid crystalline and liquid states were presented. In thin layers the molecules arrange themselves parallel to each other and form equidistant layers whose spacing is a measure of molecular length. 2. Paraffin wax, although a mixture of many normal hydrocarbons, yields diffraction lines characteristic of only one spacing corresponding to a pure component which may be present in small quantities. Data were presented to show how this spacing is a function of melting point, source of wax, and composition, and for a given wax upon the rate of crystallization. Data on narrow cuts indicate interesting progressions by no means linear or simple. The effects of small amounts of addition agents, such as acids, soaps, dyes, amines, on the long spacings are in general to increase the value, except for acids or soaps which impress their own spacings on the more weakly orienting hydrocarbon molecules. The relationship between the x-ray data and some of the important properties, particularly grain size, moisture penetrability, and transparency is such as to simplify practical problems and specifications. Preliminary data in this field are presented chiefly to show the great value of further intensive and co-operative researches.

Analysis of Gas and Gasoline Mixtures

Walter J. Podbielniak and E. H. Leslie

An apparatus and procedure developed for the analysis of gaseous and volatile liquid mixtures by fractional distillation consists essentially of an efficient fractionating column and accessories for the control of the distillation and for the collection and measurement of the distillate. The distillation is conducted at pressures sufficiently low to avoid condensation of distillate in the connecting lines from the fractionating column, and the gaseous distillate is allowed to pass through an almost closed stopcock, controlling the rate of distillation, into a closed container at a pressure lower than column pressure. The amount of distillate collected at any time is indicated by the rise of pressure in this container. Thermocouples are used to measure the temperature of the fractionated vapor at the top of the column. Distillation curves are obtained, with fairly sharp breaks between individual hydrocarbons, from which percentages may be accurately determined. The apparatus and analytical procedures have been successfully applied to the analysis of natural gas and natural gasoline, motor fuels and absorption oils. The apparatus is comparatively simple and rugged and adaptable for use in industrial laboratories. A gas analysis may be completed in from one to five hours and a liquid analysis in four to fourteen hours, depending on the number of hydrocarbons determined and the accuracy desired. A full description of the apparatus and analytical procedure was given with sample distillation curves and calculations.

Petroleum Separation Apparatus

Edward W. Washburn, Johs. H. Bruun, Mildred M. Hicks, and Martin Shepherd

This paper contained a description of apparatus and methods devised and employed for the fractionation of petroleum into its constituent hydrocarbons. These include the following:—

1. A new design of rectifying-column plate which combines the bubble cap and reflux drain.

2. A rectifying still with a twenty-plate column and with means for independently controlling and measuring the temperatures of the plates. The still is designed for distillation in a stream of an inert gas (CO_2) without boiling. It is provided with a purifying train for the CO_2, with a series of condensers with stepped temperatures down to —80°C and with a final absorber for the CO_2.

3. A set of all-glass rectifying stills for vacuum distillation. These stills have vacuum-jacketed columns, mercury-sealed stopcocks, and provision for intermittent feeding of liquids and withdrawal of fractions during the distillation. They are heated by immersion in an electrically heated bath of nickel shot.

4. Various types of molecular stills by means of which distillation can be carried out at temperatures at which the vapor pressure at the distilling surface is extremely low, even as low as 0.000001 mm. of mercury if necessary.

5. Methods and apparatus for fractionation by crystallization or melting.

6. An apparatus for combustion analysis with special provisions for purifying the oxygen employed and with all rubber connections eliminated. With this apparatus the combustion of a hydrocarbon can be carried out to determine the percentage of C and H each to about 0.02.

The change in the iodine number of the "wax-distillate" fraction of a petroleum oil produced by heating it for different periods and at different temperatures up to 370°C in (a) air and (b) H_2, N_2, and CO_2, respectively, was determined and it was shown that in the absence of air this change is greatly reduced, thus making it possible to distill petroleum at high temperatures without cracking provided all air is excluded.

Mercaptans in Hydrocarbon Solution

P. Bergstrom and E. Emmett Reid

A study was made of the method of analysis outlined by Faragher, Morrell and Monroe using primary, iso, and secondary mercaptons of three, four, and five carbons. The treatment with acid cadmium chloride and with metallic mercury does not affect the percentage of mercaptan sulphur added. The mercaptans were removed from the naphtha by the use of silver nitrate instead of "alcoholic doctor," the percentage of mercaptan being estimated by the use of lamp method before and after removal, or by using standard silver nitrate and titrating the excess with ammonium thiocyanate. As digestion with glacial acetic acid and zinc causes decomposition of mercaptans, the lamp method must be used after removal of mercaptans with silver nitrate or some other reagent.

Olefins and Aromatics in Gasolines

H. G. Schneider

In order to determine the aromatic content of a gasoline the olefins are first removed with anhydrous aluminum chloride, and the hydrocarbon thus obtained treated with 98 percent H_2SO_4. The change in volume of the hydrocarbon after acid treatment gives the amount of aromatics present. The total olefin and aromatic content of the gasoline is determined by the change in volume produced by treatment of the oil with a 5 percent solution of concentrated HNO_3 in 98 percent H_2SO_4. The difference between the values obtained for the olefin plus aromatic content and the aromatic value gives the olefin content. The method has been tested by analyzing solutions of known concentrations of olefins and aromatics and also by adding known mounts of these substances to crack stocks.

Analysis of Gasolines

H. G. Schneider and H. J. Uhl

In this paper the methods of Tizzard and Marshall, Riesenfeld and Bandte, Kattwinkel and Francis were compared with a new method of analysis. It was shown that the Francis method which gives the amount of olefins present in weight percent and the new method which gives the value in volume percent are equivalent. By combining these values it is possible to determine the molecular weight of the olefins present in the gasoline. By noting the change in molecular weight of the olefins during an acid treatment of the gasoline and recovering the unchanged olefins it is possible to obtain not only the amount of the olefins polymerized or sulphonated, but also the molecular weight of these substances.

Rubber Division

Although a deal of the time of the division of rubber chemistry was devoted to joint meetings, including the symposium on polymerization hereinbefore referred to, it found time to hear separately more than a dozen papers and to have a dinner. Its sessions were held at the Hotel Preston, far from headquarters. Some of the contributions to the division's general program were the following:—

Pigment Reinforcement of Rubber

Harlan A. Depew

Dispersed pigment reinforces rubber by increasing the tear resistance. Flocculated pigment hardens rubber and reinforces by increasing the resistance to cutting. It may also increase the tear resistance, but not to as great an extent as if pigment were well wet. The mechanism of the reinforcement by increasing tear resistance is that the pigment particles act as obstacles that cause the tear to proceed in a longer path going around the particles. Due to the roundabout path, the component of the force in the direction of the tear may be small. Accordingly, it is possible in the case of a fine pigment to increase the tear resistance even though the rubber-pigment bond is much weaker than the rubber itself. The hardness of a stock containing flocculated pigment is due to the rigidity of the structure assumed by the flocculated pigment. During the early moments of hot vulcanization, rubber is fluid, and the degree of wetting may be largely determined during this period. some of the pigments becoming dispersed and some becoming flocculated.

Dispersion of Pigments in Rubber

Ernst A. Grenquist

The author's previously reported findings that agglomeration and flocculation of pigment particles during milling and vulcanization considerably influence the degree of pigment dispersion and the reinforcing power in a rubber compound were confirmed by later experiments reported in this paper. It also brought out new microscopic evidence concerning the dispersive changes brought about either by substances already occurring in crude rubber or by materials that are added during the compounding. Pigments were mixed with either crude or acetone-extracted rubber. These compounds were examined with regard to pigment dispersion and were then cured under the microscope using a steam-heated micro-vulcanizer under varying conditions of temperature, time of cure, etc. Interesting changes in pigment dispersion (forming the basis of this paper) were recorded either in photomicrographs or micro-cinematographically. The conclusions arrived at were outlined and further microscopic research in this field was emphasized.

Carbon Black Evaluation

D. F. Cranor and H. A. Braendle

The use of carbon black in an ever-widening range of compounds and the introduction of new grades of blacks spoken of as soft carbons, calls for a means of comparing them. Careful consideration was given to the variables liable to affect any attempt to evaluate a pigment for use in rubber, and a fundamental base formula was used as a standard of reference. The quality of compounds at various pigment loadings and the range of useful loadings for a variety of commercial and experimental carbon blacks was quantitatively studied by means of the "Delta A Function."

Excursions and Entertainments

Many excursions of an instructive or purely pleasurable nature were provided for the A. C. S. visitors by the local committee representing the northeastern section of the society. Other trips, a regular featuer of life at Swampscott, were taken by many of those attending the convention. Dancing and musical programs were provided every day.

Among the trips were a visit Wednesday afternoon to the Massachusetts Institute of Technology and one to inspect the new chemical laboratory at Harvard University, Thursday afternoon. President Lowell of Harvard formally welcomed the visitors on the latter occasion, and tea was served by the university department of chemistry.

Friday, the business of the meeting over, the visitors remaining were taken as guests of the local committee on a trip along the north shore to Gloucester, where a typical shore dinner was provided.

The ladies were taken on several trips to textile and shoe plants, the factories of the Atlantic Gelatin Company, and the women's colleges in the vicinity of Boston. They were entertained at luncheon at Wellesley, Thursday. Groups of members also visited nearby industrial plants, including the gelatin factory and several waste-treating plants.

A concert was given Tuesday evening by the Mendelssohn Club of Boston, George Dane, vocal soloist, and Alwyn Schroeder, violoncellist. After the concert there was an address on "Life Is a Great Adventure," by Dr. Samuel W. Graffiin.

An exhibition of aerial warfare, including the laying of a smoke screen, was given at the beach Wednesday afternoon.

The qualifying round in a golf tournament was played at the Tedesco Country Club, Tuesday afternoon. The final round was played at the same place, Thursday afternoon. Twenty-five players participated, and eighteen handed in cards. The prize for low gross score, a bronze figure of a golfer, was won by H. O. Newman with a score of 87. E. B. Ray, 95-25-70, won the low net prize, a repeating razor.

Mary L. Sherrill and Marston T. Bogert were speakers at a luncheon of women chemists at Marblehead, Wednesday.

Manganese Producers Boost Domestic Output

WASHINGTON, Sept. 11, 1928.

The American Manganese Producers' Association closed its first annual convention today after a two-day session, attended by close to one hundred delegates.

Officers re-elected were J. Carson Adkerson, president; John B. Cole, first vice-president; A. J. Seligman, treasurer; H. A. Pumpolly, secretary; Richard S. Brown, chairman of the board of directors; and executive committee consisting of Mr. Adkerson as chairman, Richard H. Brown, H. A. Pumpolly, A. J. Seligman and D. H. McCloskey.

New directors were elected as follows:—O. D. Hutchens, Manganese Ore Company, Watauga Valley, Tenn.; Ottemar Stange, Stange Construction Company, New York City; W. R. Spencer, Luna Manganese Company, Jackson, Mich.; W. J. Staunton, Cuban-American Manganese Corporation, New York; Herbert Wilson Smith, Union Carbide Company, New York.

The Association adopted a resolution thanking the United States Bureau of Mines and the Geological Survey for their aid to the industry and asking Congress to appropriate more funds to be used by these bureaus in assisting the development of mineral resources. All officers and directors were re-elected for the ensuing year.

The theme of the convention was the development of low grade manganese ores. It was conceded that the supply of rich ores in this country is limited, but that there are vast amounts of ores of various types containing manganese in small percentages. The producers were told that these reserves should be worked for military reasons and to make the United States independent of imports of manganese; that they can be worked at profit by methods used with other ores and through promising research work; and that new ways of using low grade manganese ores are in prospect.

In opening the convention the president of the association, J. Carson Adkerson, said in part.—

This association was formed August 2, 1927, in Washington for the purpose of fostering the production, beneficiation, and use of domestic manganese bearing ores. Much has been accomplished in the short period which has elaped since the association was organized, but today we stand too close to the work and form too much a part of it. It may well be said that we have crossed the threshold of accomplishment and have passed into the dawn of an era which is destined to bring forth much in the development of American manganese.

The possibilities of using low grade manganese ores as a constituent of fertilizer was described by Dr. Oswald Schreiner, in charge of the division of soil fertility of the United States Department of Agriculture. He said that recent careful experiments have proved that the presence of manganese in the soil produces chlorophyll in plants, causing them to have a green color and to grow and bear fruit normally.

Why the development of the domestic manganese industry should be fostered was the topic of a discussion led by A. H. Hubbell, of the Engineering and Mining Journal. Domestic supplies of crude manganese bearing material were described by L. B. Miller, Cleveland.

A technical description of the different geological formations in Virginia which contain manganese deposits was given by J. S. Grasty, of the University of Virginia.

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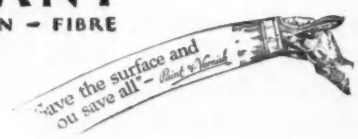

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Fertilizer Materials

Blood Market Firmer — Nitrogenous Declines —Bone Meal Higher on Spot—Tax Tag Sales Off in Principal Cotton States

Trading in fertilizer materials picked up a little last week, and the markets were shaping up for the fall selling campaign. Changes in spot quotations were not of outstanding importance, the general position of the market remaining rather steady. Mixers were submitting more inquiries for materials, but the volume of actual sales was slow in developing. Blood and spot steamed ground bone were higher, while reductions were named on nitrogenous and steamed ground bone at Chicago.

According to the National Fertilizer Association, while tag sales for July, 1928, were 18 percent less than for July a year ago, for August, this year, total sales were 9 percent larger than for August, 1927, and showed an increase of 39 percent over August, 1926. The increase, however, was due largely to Indiana, Louisiana, Virginia and Florida. Most of the leading cotton States showed a decrease from last year, and sales in some of them were less than in August, 1926. Sales in North Carolina for August were only 30 percent of August, 1927; South Carolina, 25 percent; Georgia, 25 percent; Alabama, 20 percent; Mississippi, 12 percent; Tennessee, 38 percent, and Arkansas, 15 percent. The most striking fact in the table is the large decrease in sales in the leading cotton States and the material increases in States where fertilizer is used largely on other crops than cotton.

For the season from December to August, inclusive, total sales were 27 percent larger this year than last. Every State showed an increase, and the increases were as follows:—Texas, 76 percent; Louisiana, 59 percent; Arkansas, 53 percent; Mississippi, 50 percent; Tennessee, 48 percent; Alabama, 47 percent; Georgia, 26 percent; Missouri, 23 percent; North Carolina and Indiana, 19 percent each, South Carolina, 15 percent, and Virginia, 12 percent.

Aconcagua, which arrived September 10, moving out at the inside figure. Relatively little buying interest was being shown in futures, and the market continued unchanged at $2.15 per 100 pounds for October-November-December, and $2.17½ for January-June, 1929.

LONDON, Sept. 4.—There is a good movement of soda nitrate reported, and the market is in firm shape. The centralization plan for the sale of nitrate in Europe and Egypt has begun to function, with a total of 1,800,000 tons allotted to European distributors, leaving about 1,400,000 tons for the United States and other countries. The recently organized Chilean Nitrate of Soda Distributors, the organization controlling the centralized sales activities, will handle a minimum of 51 percent of the European share, it is reported.

Current prices on fertilizer materials, formerly printed on page 12, are now printed at the end of this market report.

Sulphate of Ammonia.—Continued strength in spot ammonia sulphate prevailed during last week's trading. Current domestic production continued to move out readily against standing contracts, with producers quoting $2.40 per 100 pounds, bulk, delivered in both Northern and Southern markets. Resale material continued to command a 5c. premium over this quotation, with little material available.

LONDON, Sept. 4.—A strong market for export sulphate continues, the market ruling firm at £9 13s. 6d. per ton in double bags, prompt shipment, f.o.b. United Kingdom ports, this quotation being 2s. over the previous market level. Further advances in the near future are looked for. Inquiry from the home trade is fair with the market quoted at £10 per ton for August delivery, the quotation rising progressively to £10 13s. per ton for February-June delivery, on neutral quality sulphate, basis 20.6 percent nitrogen, delivered, carriage paid, to buyer's nearest wharf or station, in lots of 6 tons or over.

Cottonseed Meal.—The market has worked into easier position on spot meal, reflecting the weakness on new crop. Offerings of spot material were reported during the week at $44 per ton for the 7 percent ammonia grade, in bags, f.o.b. mills, a reduction of $1 per ton from the previous week's figure. Sellers were quoting 7 percent meal for October shipment at $32 to $34 per ton. Fertilizer manufacturers were reported showing considerable interest in meal at the latter quotations, but were deferring buying in anticipation of possible further declines.

Blood.—High-grade ground at Chicago came in for a better inquiry last week, the market showing an advance of 25c. per unit to $4.75. Although South American blood, to arrive, could still be had in a limited way at $4.95 per unit, sellers in some instances were asking $5, with every indication that the general market would go to the latter level.

Fish Scrap.—With the run of fish again more plentiful, it was reported that further concessions were being granted on dried scrap in some instances. The market continued held at $5 and 10c. per unit, f.o.b. factory, but sales were reported made, delivered at Norfolk, on the basis of $5 and 10c. per unit, delivered. Makers were clearing up their deliveries on old when-and-if-made contracts, and were in position to offer prompt material a little more liberally.

Nitrogenous.—Larger offerings were reported, and the market sagged off 5c. per unit to $3.80 for the 8-10 percent ammonia grade, in bags, September shipment, c.i.f. ports. Demand was rather quiet.

Tankage.—There was little buying interest shown in this material last week. Mixers were not in the market for supplies in any real volume. Spot

Fertilizer Sales Indicated by Sales of Tags*

	August and December				August, short tons			
	Percent of 1927.	1928.	1927.	1926.	Percent of 1926-27.	1927-28.	1926-27.	1925-26.
†Virginia	136	19,841	14,585	10,600	112	368,957	329,160	351,188
North Carolina	30	1,300	4,400	1,600	119	1,319,988	1,107,107	1,172,179
†South Carolina	25	435	1,733	400	115	793,810	688,961	829,682
Georgia	25	344	1,380	....	126	887,374	702,167	765,819
Florida	131	20,950	16,050	13,920	118	340,988	289,719	271,478
Alabama	20	100	500	1,050	147	683,300	464,100	622,114
Mississippi	12	50	400	....	150	309,861	207,087	276,200
†Tennessee	38	1,300	3,390	6,377	148	129,440	87,647	130,404
Missouri	115	15,603	13,522	10,705	123	37,611	30,630	31,580
†Arkansas	15	80	550	....	156	115,258	75,137	125,025
†Louisiana	335	2,600	775	877	159	119,358	75,079	103,122
†Texas	150	300	200	50	176	132,201	74,031	119,090
Indiana	109	52,444	48,167	37,538	119	193,407	162,135	157,790
Totals	109	115,347	105,652	83,117	127	5,431,553	4,292,960	4,955,671

* Monthly records of sales of tags are kept by State control officials and are usually larger or smaller than actual sales of fertilizer.
† Cottonseed meal sold as fertilizer included.

Price Changes

Prices were changed during the past week as follows:—

Advanced
Blood, high grade, ground, Chicago, 25c. per unit
Bone meal, steamed, 3 to 50 p.c., $2 per ton

Reduced
Bone meal, f.o.b. Chicago, $1.50 per ton
Cottonseed meal, 7 p.c., mills, $1 per ton
Nitrogenous, September shipment, 5c. per unit

Comparative Values

Index numbers compiled from four typical fertilizer materials on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
97.2	97.2	97.6	99.2

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Ammoniates

Nitrate of Soda.—Spot inactivity continued in the nitrate position in last week's trading. Local stocks were not in much demand, and buyers in most instances were seeking concessions when coming into the market. Quotations ranged $2.10 to $2.12½ per 100 pounds, with most of the previously unsold stock from the cargo of the

Valuable information on Imports and Exports of Fertilizer Materials is given in port lists beginning on page 5.

holdings, on the other hand, were not excessive, and holders were not inclined to force sales at the expense of prices. Quotations remained unchanged both here and at Chicago.

Phosphates

Steady markets for the more important phosphates continued in effect last week, with business fairly active. Aside from two revisions in bone materials, the market was without price changes.

Bone Materials.—Bone meal, 3 and 50 percent, was $2 per ton higher on spot, sales being reported at $36 per ton. The Chicago market, however, had eased off a little, under the influence of heavier offerings, material being offered for prompt shipment at $28.50 to $30 per ton, the inside quotation being $1.50 under previous quotations. Price changes were lacking on other grades. Trading was routine, with holders showing firm price views in most instances.

Phosphate Rock.—Florida producers were getting a good demand for high-grade land pebble, superphosphate manufacturers being in the market for stocks in a large way. The bulk of the week's trading, however, consisted of deliveries on standing contracts, with prices continuing in steady to strong position on all grades.

Superphosphate.—Reports from the South indicated a well-sustained demand for superphosphate for prompt shipment, with fertilizer manufacturers being in the market in a large way. Quotations showed no further changes in last week's trading.

Potashes

Importers were busy in getting their stocks in shape for the fall and spring sales campaigns, and there was little additional booking of salts for shipment from abroad. On orders booked prior to October 1 for October shipment a discount of 4 percent is offered by the foreign syndicates.

Little inquiry for potash for delivery out of store has been seen thus far in the season, and it is indicated that the American agents for the German and French syndicates will carry but nominal stocks of potash at Atlantic and Gulf ports this season.

Sulphur and Pyrites

There was a continued good movement of sulphur reported during the past week's trading, and prices were firm. Fertilizer manufacturers were drawing stocks in moderate volume on contract, but acid makers were reported heavy takers.

Pyrites met with a good contract inquiry throughout the week, and the market was steady and unchanged at 13c. to 13¾c. per unit, in bulk, as to grade, c.i.f. Atlantic and Gulf ports.

Current Prices

(For late price changes, see page 2)

Ammoniates

(Unit is 1 p.c. of ammonia in 1 ton)

Ammonia sulphate, domestic, delivered Northern markets, bulk	100 lbs.	2.40	@ 2.45
Southern markets, bulk,	100 lbs.	2.40	@ 2.45
Ammonium sulphate, f.a.s. New York, double bags	100 lbs.	No prices	
single, bags	100 lbs.	No prices	
imported, synthetic, bulk, c.i.f. Northern ports	ton	No prices	
c.i.f. Southern ports, bulk,	ton	No prices	
Ammonia sulphate-nitrate, 26 p.c. nitrogen, 31.6 p.c. ammonia, imported, Northern ports, bags	ton.	57.60	@ —
Southern ports, bags	ton.	58.35	@ —
Blood, domestic, dried, 15@17 p.c. ammonia	unit	4.70	@ —
high-grade ground, 16@17 p.c., f.o.b. Chicago, bulk	unit	4.75	@ —
imported, Sept. shipment	unit	4.95	@ —
Cottonseed meal, 7 p.c. ammonia, mills, bags	ton.	45.00	@46.00
October	ton.	32.00	@34.00
Fish scrap, dried, 11@12 p.c. ammonia and 15 p.c. bone phosphate, factory, bulk	unit	5.00	& .10
ground, 11@12 p.c. ammonia, 15 p.c. bone phosphate, f.o.b. Baltimore, bags	ton.	76.00	@ —
wet acidulated, 6 p.c. ammonia, 3 p.c. phosphoric acid, factory, bulk	unit	4.25	@ .50
Hoofmeal, f.o.b. Chicago	unit	4.00	@ —
imported, to arrive	unit	8.90	@ —
Lime nitrate, 15½ p.c. nitrogen, 28 p.c. lime, imported, Northern ports, bags	ton	No prices	
Southern ports, bags	ton.	43.00	@ —
Lime-urea, 34 p.c. nitrogen, 41.3 p.c. ammonia, 100-kilo bags, gross for net, car lots, Northern ports	ton.	82.00	@ —
Southern ports	ton.	82.75	@ —
Nitrogenous, 8@10 p.c. ammonia, bags, September shipment, c.i.f.	unit.	3.80	@ —
Soda nitrate, bags	100 lbs.	2.10	@ 2.12½
Oct.-Nov.-Dec.	100 lbs.	2.15	@ —
Jan.-June	100 lbs.	2.17½@	—
synthetic, domestic, equal monthly quantities, January-June, 1929, bags, ports.	100 lbs.	2.17½@	—
bulk, ports	100 lbs.	2.07½@	—
Tankage, domestic, concentrated, 14 to 15 p.c., f.o.b. Chicago, bulk	unit	4.25	@ —
garbage, f.o.b. Chicago, bulk,	ton	5.00	@ 6.00
ground or screened, 10@15 p.c., bulk	unit	4.65	& .10
unground, bulk	unit	4.40	& .10
11@15 p.c., f.o.b. Chicago, bulk	unit	4.25	& .10
South American, to arrive	unit	5.00	& .10

Phosphates

(Quotations per ton, in bulk)

Acid phosphate (see superphosphate).			
Bones, raw, ground, 4½ p.c. ammonia, 50 p.c. phosphate, f.o.b. Chicago		42.00	@ —
South American, to arrive		38.00	@ —
steamed, ground, 1¼ p.c. ammonia, 60 p.c. phosphate, f.o.b. Chicago		28.50	@30.00
unground, soft, f.o.b. Chicago		26.50	@27.00
South American, to arrive		34.50	@ —
Bone meal, steamed, ground, domestic, 3 p.c. ammonia, 50 p.c. phosphate		36.00	@ —
f.o.b. Chicago		28.50	@30.00
unground		28.00	@30.00
Phosphate rock, Florida, high-grade, hard, 77 p.c., mines		6.50	@ —
land pebble, 68 p.c. minimum, mines		3.10	@ 3.25
70 p.c., mines		3.75	@ 3.90
72 p.c., mines		4.25	@ 4.35
basis 75 p.c., 74 p.c. minimum, mines		5.25	@ 5.50
75 p.c. minimum, mines		5.75	@ —
basis 77 p.c., 76 p.c. minimum, mines		6.25	@ —
Tennessee, 72 p.c., mines		5.00	@ —
75 p.c., mines		5.50	@ —
Superphosphate, basis 16 p.c., f.o.b. Baltimore		10.00	@ —
guaranteed 16 p.c., f.o.b. Baltimore		10.50	@ —

Potashes

Kainit, 12.4 p.c., bags	ton.	12.00	@ —
bulk	ton.	9.00	@ —
14@16 p.c., bags	ton.	12.50	@ —
bulk	ton.	9.50	@ —
Manure salts, 20 p.c., bags	ton.	15.40	@ —
bulk	ton.	12.40	@ —
30 p.c., bags	ton.	21.75	@ —
bulk	ton.	18.75	@ —
Muriate, 80@85 p.c., basis 80 p.c., bags	ton.	36.40	@ —
bulk	ton.	34.80	@ —
Potash-magnesia sulphate, 48@53 p.c., basis 48 p.c. (double manure salt), bags	ton.	27.25	@ —
bulk	ton.	25.65	@ —
Sulphate, 90@95 p.c., basis 90 p.c., bags	ton.	47.30	@ —
bulk	ton.	45.70	@ —

Bagged salts sold on foreign weights, tares and analyses; bulk on American weights and foreign analyses.

The following discounts are offered:—On orders prior to October 1 for October shipment, 4 percent: November 1 for November shipment, 3 percent; December 1 for December shipment, 2 percent.

Prices guaranteed against decline up to April 30, 1929.

Sulphur and Pyrites

Brimstone, crude, car lots, mines, bulk	ton.	18.00	@19.00
ex vessel, Atlantic ports, bulk,	ton.	22.00	@23.00
Pyrites, Spanish, c.i.f. Atlantic ports, bulk	unit-ton	.13	@ .13¾

Atlanta Fertilizer Market

ATLANTA, Sept. 14, 1928.

Trading continues light in most items and orders small. Potash bookings are reported ahead of last year, with indications of an excellent season. The ammoniate market has become less active, due, it is thought, largely to the position of cottonseed meal.

Nitrate of soda continues to sell in scattering lots. Sulphate of ammonia is practically off of the market. Brokers state that resale material has disappeared. Contracting for January and beyond is around $48 per ton for Southeastern points.

While there are quotations around $33 per ton for cottonseed meal for October and beyond on 7 percent goods, dealers are finding very little willingness to contract. On the other hand, not all fertilizer manufacturers are in a hurry to contract, hoping that there may be more than the usual amount of off-colored meal and lower prices as the season advances. The cottonseed meal situation has weakened organic ammoniates in general and, in addition, has encouraged a waiting attitude to see what further developments there will be before it is necessary to buy.

Synthetic ammoniates have been slow to move this season, but increased sales are expected at interior points following the sell-out of sulphate of ammonia. The limited supply of lime urea placed in this market by synthetic producers seems to have been absorbed by the trade and brokers are unable to quote on deliveries short of January.

Sales of superphosphate for farm use in the South this fall are reported backward, but some activity is reported for use in October and November, when most sowing is done in the South. No prices have been put out for superphosphate for Mississippi and westward as yet. This situation is puzzling the trade.

The decided drop in prices of cotton in consequence of the crop report put out by the government on September 8 showing prospects of a larger crop than predicted a month before, has had a dampening effect on the fertilizer manufacturers. Crop conditions in the Southeast, where fertilizers are largely used, seemed to be below that of other sections of the belt.

The quotations of this market are as follows:—

SUPERPHOSPHATE.—$11.46 per ton, 16 percent basis, Atlanta.

NITRATE OF SODA.—$2.17½ per hundred at Southern ports.

SULPHATE OF AMMONIA.—Deliveries January and beyond, $48 to $49 per ton, Southeastern points.

COTTONSEED MEAL.—$46 to $47 per ton, 7 percent meal, spot; $33 per ton, October, mill points.

AMMONIUM SULPHATE NITRATE.—$58.35 per ton, Southern ports.

CALCIUM NITRATE.—$43 per ton, Southern ports.

LIME UREA.—January delivery, $82.40 per ton, Southern ports.

NITROGENOUS.—$3.85 per unit of ammonia, Southern ports.

TANKAGE.—$5 per unit of ammonia and 10c. B.P.L., Southern ports.

BLOOD.—$5 per unit of ammonia, Southern ports.

BONE.—Raw, 4½ and 45, $38 per ton, ports; steam, 5½ and 43, $35 per ton.

POTASH.—At importers' schedules.

Chicago Fertilizer Market

CHICAGO, Sept. 14, 1928.

While there were some conflicting price movements reported in the Chicago fertilizer market, the whole market appeared to be in good tone with most of the changes, all of which were of a minor extent, toward better levels. There was a stronger tone in the good grades of blood and tankage, and some upward readjustments were reported in the prices at which the bulk of the bone materials moved. The market as a whole was still moving rather slowly.

Ruling prices were:—

BLOOD (per unit of ammonia).—High-grade, ground and unground, $4.60 to $4.75; unground, suitable for feeding, 11 to 12 percent, $4.75 to $5; plain to good, $4.50 to $4.75.

TANKAGE MATERIAL (per unit of ammonia).—High-grade, ground, $4 to $4.15; unground, $3.10 to $3.25; hoof meal, $4 asked; liquid stick, $3.50 to $3.75; unground bone tankage, per ton, $24 to $25.

BONE MATERIALS (per ton).—Ground steamed bone, $28.50 to $30; unground steamed bone, $26.50 to $27; raw bone meal, $35 to $45; cattle jaws, skulls and knuckles, $41 to $42; rejected manufacturing bones, $45 to $50; grinding hoofs, pigs' toes and waste horn materials, $45 to $47.50; junk and hotel kitchen bones, $27 to $28; pork cracklings, soft pressed, $85 to $87.50; beef cracklings, soft pressed, $50 to $55; hard pressed cracklings, per unit of protein, $1.05 to $1.10.

Baltimore Fertilizer Market

BALTIMORE, Sept. 14, 1928.

Trading this week has been quiet, with the fall shipping season not yet started, and with the manufacturers of fertilizers disposed to hold back with orders and see what the results in the way of a volume of business will be. Expectations, it should be said, do not run high, and this helps to make the current period decidedly uneventful. There is no important change in the quotations, with the nominal figures being much the same as they have been, and with the feeling in the trade somewhat easier. The figures named on fish scrap, for instance, have worked off a little, with tankage about steady and with nitrogenous material tending lower, while garbage tankage has stiffened.

Prices are as follows:—

FISH SCRAP.—Some sales made during the last week as low as $5 per unit at factory down the Chesapeake Boy, which seems to indicate that the catch of menhaden is rather better than it was. Most of the ammoniate is distributed in the shape of fish meal, it is said, at $72 or so a ton.

TANKAGE.—Current figures are still around $4.75 to $4.85 per unit for high grade ground material, c.a.f. basis Baltimore, with the movement small as far as the demand from fertilizer trade is concerned.

BLOOD.—Nothing has occurred to change the situation with respect to this ammoniate, which is still held at $5 per unit for high-grade ground stocks, c.a.f. basis Baltimore, though buyers are not disposed to make any distinction of consequence between ground and unground supplies.

SUPERPHOSPHATE.—Bulk run of pile, 62½c.: flat 10 percent, $10.50; flat 18 percent, $11.90; flat 20 percent, $13.40 per ton. The bulk run price, of course, is not per ton.

NITRATE OF SODA.—$2.15 per 100 pounds up to October 1, and $2.17½ for later deliveries.

NITROGENOCS MATERIAL.—The quotations have eased off to about $3.85 per unit, with the business generally not especially active.

GARBAGE TANKAGE.—The season for this organic ammoniate is over, but the quotations are firm around $4.10 and 70 per unit.

SULPHATE OF AMMONIA.—This product has stiffened a little, and the price now named is around $47 per ton, with considerable interest shown by potential buyers.

POTASH.—There is a complete absence of developments in this division of the crude material trade, with the list of the foreign sellers unchanged, except that the discounts are off. The prices named are the same for all of the Atlantic ports.

BONE.—With the trade on the whole quiet, the quotations on this ammoniate are virtually unchanged at $32 to $33 for 3 and 50 ground steamed stocks, and $37 to $38 for 4½ and 50 ground raw stocks per ton.

Potash Boat Sails from Hamburg for Milwaukee

The Norwegian steamship "Roa" cleared from Hamburg September 3 for Chicago and Milwaukee with 1,500 tons or 15,000 bags of muriate of potash.

The ship is scheduled to arrive about October 1 at the first of her Lake Michigan ports of call. Two hundred tons of the cargo will be discharged into storage at Milwaukee, and the remainder at the Terminal & Transportation Corporation's docks on the Calumet River, Chicago.

These two cities have been designated receiving and distributing terminals for the mid-west stocks of Franco-German potash for 1928-29.

Fertilizer Freight Fixed

WASHINGTON, Sept. 13, 1928.

The Interstate Commerce Commission has modified its order in the case of the E. Rauh & Sons Fertilizer Company so as to make the rates prescribed for shipments of fertilizers from Indianapolis, Ind., the same as the rates recently prescribed in the Ohio Farm Bureau Federation case for all shipments of fertilizer and fertilizer materials in the Central Freight Association territory.

The two cases were decided separately and both were reopened. The commission today stated that it saw no reason for not applying to shipments from Indianapolis the new and lower mileage scale it has prescribed for all of central territory. The new order in the Rauh case is to take effect December 5, 1928, the same date as the order in the Farm Bureau case.

Cincinnati Section A.C.S. To Celebrate Anniversary

The Cincinnati section of the American Chemical Society will celebrate its 300th meeting October 10 by a dinner at the Hotel Alms, Cincinnati. Dr. Gerald L. Wendt will be the principal speaker, and will discuss some phase of the relation of research to industry. The meeting will be open to the public.

The Chemical Society of Cincinnati and vicinity was organized December 19, 1890, with twenty-two members and T. H. Norton as its first president. On May 18, 1891, it united with the American Chemical Society as the Cincinnati section. Three charter members, John Uri Lloyd, Alfred Springer, and Ernst Twitchell, all residents of Cincinnati, are expected to attend the anniversary meeting.

The present membership of the section is nearly 300, representing practically every field of chemical activity.

American Cyanamid Wins Plea Against Trademarks

WASHINGTON, Sept. 10, 1928.

In two decisions today the Assistant Commissioner of Patents, M. J. Moore, upheld the American Cyanamid Company in its opposition to the applications of the California Cyanide Company to register trade marks for calcium cyanide fumigants.

The word "Calcynide" was held to be a contraction of the words "calcium cyanide" and therefore a descriptive term, while the word "Citrofume" was held to be synonymous with "citrus dust" since it was shown that citrus raisers use a powdered fumigant and use the terms "dusting" and "fumigating" trees interchangeably. An examiner of the Patent Office had dismissed the opposition of the American Cyanamid Company in both cases on the ground that this company had not registered the words "calcium cyanide" and "citrus dust" which it was using on its products and therefore had no standing in the Patent Office. Mr. Moore ruled that the terms sought to be registered were descriptive and not registerable and that it appeared that the American Cyanamid Company would be injured should the words be registered as trade marks and that therefore it had a right to appear in formal opposition to the applications.

Bids and Awards

Bids Wanted

Blanc Fixe in Oil

Navy Schedule 9688

Bids are wanted September 28 at the bureau of supplies and accounts, Navy Department, Washington, for furnishing 30,000 lbs. blanc fixe in oil for Mare Island.

Disinfectant

U. S. M. C. Proposal 184

Sealed bids are wanted until September 25 by the U. S. Marine Corps, 1100 South Broad street, Philadelphia, under proposal 184, for 3,800 gals. disinfectant.

Fuel Oil

U. S. Engineer, Galveston

Bids are wanted September 21 by the district engineer, Galveston, Tex., for bunker C fuel oil for three months period.

Gasoline and Lubricants

Washington Q. M., Proposal 21

Bids are wanted September 20 by the Q. M. supply officer, Twentieth and C streets N. W., Washington, proposal 21, for 158,000 gals. gasoline, 750 lbs. grease and 6,220 gals. motor oil.

Gasoline, Kerosene, Lubricants

U. S. Shipping Board

Bids are wanted September 19, proposal 147, by the U. S. Shipping Board, Washington, for lubricating oils, greases, kerosene and gasoline for a period of one year, beginning December 1, 1928.

Linseed Oil

Navy Schedule 9631

Bids are wanted September 18 at the bureau of supplies and accounts, Navy Department, Washington, for furnishing 116,250 lbs. of raw linseed oil for Cavite, Philippine Islands.

Sperm Oil

U. S. M. C. Proposal 187

Sealed bids are wanted September 26 by the U. S. Marine Corps, 1100 South Broad street, Philadelphia, under proposal 187, for 1,000 gals. sperm oil.

Contracts Awarded

Fuel Oil

Springfield Armory Circular 9

Gulf Refining Company, 20,000 gals. bunker fuel oil, $1.80 bbl.

Springfield Armory Circular 23

New England Oil Refining Company, 30,000 gals. fuel oil, 3.25c. gal.

Gas Oil

Wright Field Circular 52

Roxana Petroleum Corpn., 21,000 gals. gas oil, 5.026c. gal.

Gasoline

U. S. Engineer, Rock Island

Sinclair Refining Company, 10,000 gals. gasoline, $988, f.o.b. shipping point.

Gilding Metal

Frankford Arsenal Circular 66

Baltimore Tube Company, 90,000 lbs. gilding metal, 5.49c. lb.

Frankford Arsenal Circular 65

Chase Brass & Copper Company, 3,000 lbs. gilding metal, 24.94c. lb.

Lubricating Oil

Wright Field Circular 52

Standard Oil Company of New Jersey, 15,000 gals. medium lubricating oil, 32.95c. gal.

SULPHATE OF AMMONIA
NEW ENGLAND FUEL AND TRANSPORTATION CO.
250 Stuart Street Boston, Mass.

PEOPLES GAS BY PRODUCTS

Commercial 90% BENZOL
Commercially Pure BENZOL
Commercially Pure TOLUOL
Solvent NAPHTHA Commercial XYLOL
Denatured ALCOHOL

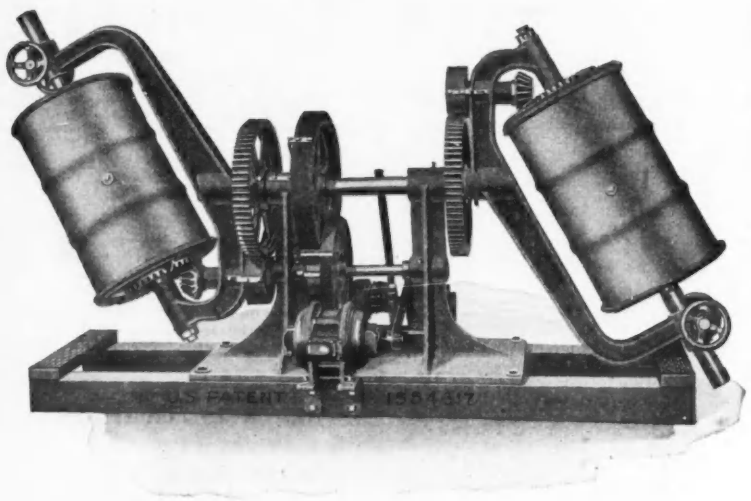
Our large Refinery and Modern Handling Facilities Assure you of Never Failing Supply Uniform Quality!

PEOPLES BENZOL GAS MOTOR FUEL

MORE PEP
LESS CARBON

PROMPT Shipment IN TANK CARS TANK TRUCKS or DRUMS

PEOPLES GAS BY PRODUCTS CORPORATION
PEOPLES GAS BLDG. CHICAGO, ILL.
PHONE WABASH 6667.



Patent Drum Cleaning Machine

Above cut represents our "GYRO" BARREL TUMBLER, a machine of SIMPLEST CONSTRUCTION GUARANTEED to WITHSTAND the SEVEREST USAGE.

It ROTATES drum at an ANGLE, thus effecting a CONTINUOUS SLIDING, of chain on the inside of drum, and *NOT* only FLOPPING of chain from end to end.

But above all it CLEANS your DRUM THOROUGHLY in LESS TIME than any device or machine on the market.

Send for details. There is no obligation

F. AUE CO., Inc., 173 Beebe Ave., L. I. City

McK. & R. Offers Preferred Stock to Public

(Continued from page 17)

30, 1928, as certified by Price, Waterhouse & Co., after giving effect to the various transactions involved in this financing, as set forth in their attached certificate, shows net tangible assets (after deducting the redemption value of preferred stocks of subsidiaries and the amounts applicable to minority common stock interests as shown on the balance sheet) of more than $28,000,000, or the equivalent of more than $90 per share of the above 309,648 shares of preference stock series A. The valuable good-will and trade names of the proposed subsidiaries are carried on such balance sheet at $1.

Certificates of deposit for common stock of McKesson & Robbins, Inc., of Connecticut are currently selling at more than $80 per share (the equivalent of over $40 per share of common stock of the Maryland Company), which indicates a market equity junior to the preference stock of over $25,000,000.

Charter Provisions

The certificate of incorporation provides, in substance, among other things, for the following:—

(1) The total authorized number of shares of preference stock is 500,000, of the par value of 50 each, issuable in series, each, except preference stock series A 7 percent convertible, with such dividend rate, liquidation value, redemption price, conversion privilege, if any, and sinking fund, if any, as may be determined by the board of directors prior to issuance of shares thereof, provided, however, that if a preference stock sinking fund be established it shall apply pro rata to all series of preference stock outstanding during the operation of such sinking fund.

(2) Preference stock series A 7 percent convertible (this issue) is entitled to cumulative quarterly dividends at the rate of 7 percent per annum, to $50 per share and accrued dividends in the event of involuntary liquidation and to $60 per share and accrued dividends in the event of voluntary liquidation; is redeemable as a whole or in part at any time on thirty days' notice at $60 per share and accrued dividends; and is convertible into common stock, share for share, such conversion ratio being subject to adjustment in the event of the issuance to holders of common stock pro rata of additional common stock for less than $60 per share.

(3) After the issuance of 320,000 shares of preference stock series A, no additional preference stock or equal preferred stock (as defined) shall be issued without the consent of the holders of two-thirds of the preference stock, unless consolidated net earnings (as defined) for twelve months out of the preceding fifteen months, or the annual average of consolidated net earnings for twenty-four months out of the preceding twenty-seven months, equal at least 2½ times the annual dividend requirements on all preference stock then to be outstanding.

(4) Without the consent of the holders of two-thirds of the preference stock, the company shall not (a) consolidate or merge into or with another corporation; (b) sell all or substantially all of its assets; (c) authorize any additional stock other than the preference stock and the common stock; (d) change the rights, preferences or privileges of the preference stock; or (e) create or permit any subsidiary to create any mortgage or other encumbrance on the property of the company or such subsidiary, except purchase money mortgages limited to the property acquired and mortgages to refund then existing mortgages and except pledges of liquid assets as security for current loans in the regular conduct of the business.

(5) No dividend (except in common stock of the company) shall be paid on the common stock nor shall the company purchase any of its common stock unless consolidated net earnings arising after April 30, 1928 (as defined) shall be sufficient for the purpose.

(6) Preference stock is non-voting except that, in the event that four quarterly dividends are in arrears, the preference stock shall have exclusive voting power until such arrears shall have been paid and the dividend on the preference stock for the then current quarterly dividend shall have been declared and paid or set aside for payment.

(7) Stockholders shall not be entitled as of right to subscribe to any additional or increased stock of any class or obligations convertible into any class of stock.

Consolidated Balance Sheet

A consolidated balance sheet as of April 30, 1928, certified by Price, Waterhouse & Co., follows:—

Assets

Current assets—		
Cash	$1,924,085.25	
Bankers acceptances	229,315.60	
Cash surrender value of life insurance policies.	50,102.08	
Marketable securities	461,455.00	
Notes and accounts receivable:* (after deducting reserves where not guaranteed) customers', $10,109,350.59; officers' and employees, $170,508.26; miscellaneous, $483,316.30	10,763,175.15	
Inventories of merchandise, materials and supplies, as certified by responsible officials, at cost or market whichever is lower	14,815,254.44	
		$28,243,387.52
Advances and miscellaneous investments—		
Advances to customers and installment notes and accounts*	$4,072,170.26	
Miscellaneous investments	511,661.06	
		4,583,831.32
Fixed assets and leaseholds (at sound depreciated values based on appraisal by the American Appraisal Co.):		
Land, buildings, machinery and equipment	$6,775,063.77	
Leaseholds and improvements to leased buildings	424,304.40	
		7,199,368.17
Deferred charges		277,265.95
Goodwill, trade-marks, trade names, etc. (carried on the books of the subsidiary companies at substantial values)		1.00
		$40,303,853.96

Liabilities

Current liabilities—		
Notes and acceptances payable	$4,163,006.83	
Accounts payable.	4,686,271.64	
Wages, salaries, local taxes, commissions, reserve for organization expenses and other accrued liabilities	583,622.65	
Dividends declared and unpaid	178,031.75	
Provision for Federal income taxes	517,757.57	
		$10,128,690.44
Mortgages payable and other long term obligations		156,476.00
Miscellaneous reserves—		
For advertising, commitments, etc.		40,000.00
Preferred stock of subsidiary companies‡		1,517,600.00
Minority interest in common stock of subsidiary companies†		66,078.19
Preference stock series A 7% convertible* (par value $50 per share)		15,482,400.00
Common stock* and surplus (represented by 664,409 shares of common stock without par value)†		12,912,609.33
Contingent liabilities—		
For bonds given to secure mortgage on property previously owned at Berry street, Brooklyn, N. Y.	$132,500.00	
Notes receivable discounted	$107,900.15	
		$40,303,853.96

* $478,137 of cash, 2,842 shares of said preference stock Series A and 48,086 shares of said common stock are being pledged to the company as a guaranty of certain notes and accounts receivable and advances to customers.

‡ Of the outstanding preferred stock of subsidiary companies $517,600 represents shares not now under agreements nor presently to be called for redemption; 10,352 additional shares of preference stock series A may be issued by the company in acquiring this stock. The remaining $1,000,000 represents an issue of 7 percent cumulative convertible preference stock (callable at 105 and accrued dividends) of McKesson & Robbins, Ltd., of Canada, over 80 percent of the common stock of which is owned by McKesson & Robbins, Inc., of Connecticut. The Connecticut corporation has guaranteed annual net profits of $100,000 to the Canadian company so long as the latter's preference stock shall be outstanding.

† This item represents the minority interest in the common stock of McKesson & Robbins, Ltd., of Canada. In the event that the Maryland company does not acquire any of the shares of common stock of McKesson & Robbins, Inc., of Connecticut, not now committed for exchange, the minority interest (excluding goodwill) would be increased by $139,088 and the common stock and surplus correspondingly decreased.

Accountants' Certificate

We have examined the books and accounts of the companies listed in the attached letter from Mr. F. Donald Coster, and of McKesson & Robbins, Ltd., of Canada, for the three years and four months ended April 30, 1928, and have examined the agreements and options providing for the sale of common stock of McKesson & Robbins, Inc., of Connecticut, the acquisition by McKesson & Robbins, Inc., of Maryland (the new company) of shares of stock of said companies and the redemption of certain preferred stocks of said companies and we certify that the foregoing consolidated balance sheet correctly sets forth the financial position of the new company and its subsidiaries giving effect as at April 30, 1928 to (a) its formation, (b) the acquisition by it of shares now under such agreements and options in part for cash and in part for capital stock, (c) the acquisition by it on similar terms of the 3.2 percent of common stock of McKesson & Robbins, Inc., of Connecticut to be presently outstanding not now committed for exchange, (d) the retirement of certain preferred stocks of said companies, (e) the sale for cash of 37,500 shares of common stock of said Connecticut corporation and the sale for cash of the remainder of the above 309,648 shares of preference stock series A and the application of the proceeds in part to the retirement of certain preferred stocks of said companies and in part to such acquisitions, (f) the elimination of the reserves for doubtful notes and accounts receivable where guarantees are to be given by the present stockholders of said companies, and (g) to other adjustments called for by the above agreements but not to payments of 6 percent interest on the purchase prices of shares of common stock of proposed subsidiaries from April 30, 1928, to the effective date of transfer, less dividend declared thereon.

We further certify that (1) the combined net sales of the businesses to be acquired and (2) the combined net profits, without including income, profits and losses from investments, real estate and life insurance not to be retained by the new company, but after deducting (a) executive salaries as now provided for, in lieu of salaries actually paid to certain individuals, (b) rentals to be paid under the terms of new leases to be executed, in lieu of rentals actually paid during the period under review, (c) a provision for depreciation and amortization based on the appraisal as of April 30, 1928, by the American Appraisal Company, (d) Federal income taxes at 12 percent, (e) dividends paid on preferred stocks of subsidiaries not now under agreements nor presently to be retired, and (f) the profits applicable to minority common stock of McKesson & Robbins, Ltd., of Canada, but not deducting the profits applicable to the 3.2 percent of common stock of McKesson & Robbins, Inc., of Connecticut, to be presently outstanding not now committed for exchange, were as follows*:—

	(1) Net sales.	(2) Combined net profits applicable to new company as defined above.†
Year ended Dec. 31—		
1925	$71,347,350	$2,669,122
1926	74,160,859	2,746,168
1927	74,950,250	2,770,036
Four months ended April 30, 1928	25,950,073	1,136,453

* Adjustments averaged an addition to profits of $5,317 per year.

† In the event that the company does not acquire any of the shares of common stock of McKesson & Robbins, Inc., of Connecticut, not now committed for exchange, the combined net profit applicable to the company for the three years and four months would have been less by an average of $18,527 per annum.

Coaltar Products

Producers Advance Paranitroanilin Sharply as Stocks Decline—Extensive Call for Toluene and Xylene

The expansion in the volume of trade in coaltar products, first noticeable after the Labor Day holidays, made further progress last week. The chief interest in the market has centered in the increased purchases for fall requirements on the part of some branches of the textile trade. With doubts over the size of the cotton crop dispelled, the textile industry has gone ahead and has taken care of some of its requirements in coaltar intermediates. Of feature interest among the intermediates was an advance of 3c. per pound in prices for paranitroanilin to a basis of 55c. per pound on spot, as the product had become decidedly scarce. The producers reported some extensive contracting during the week, and the outlook was that announcement of higher contract quotations would be made as of October 15. Since practically all coaltar colors were in good demand, there was a natural increase in the volume of contract withdrawals in the intermediates which enter into them.

Toluene and xylene were the most interesting products in the general run of basic products. Notwithstanding that production of benzol was large, the outlets in the trades and industries was broad enough to prevent any accumulations. The producers of toluol were forced to turn down additional orders calling for September delivery, due to the fact that their production had been spoken for in advance. A lively demand appeared for xylol from the photographic, lacquer and printing ink industries. Creosote oil, cresol and naphthalene lacked change.

The United States Marine Corps, Philadelphia, will receive bids until September 25 for 3,800 gallons of disinfectant.

Current prices on coaltar products, formerly printed on pages 10 and 12, are now printed at the end of this market report.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced
Paranitroanilin, 3c. per lb.	None.

Comparative Values

Index numbers compiled from twenty typical coaltar products on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
125.0	125.0	125.0	128.3

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Basic Products

Benzene (Benzol).—The call for the commercial and pure grades from domestic consumers at 22c. to 23c. per gallon, tanks works, and 27c. to 28c. per gallon drums, works was along fairly broad lines. Despite the substantial current benzol recovery the rate of steel production in the Chicago district remaining at something over 80 percent of capacity, while that in the Greater Pittsburgh district was between 80 and 85 percent of capacity, with the average of the various steel corporation subsidiaries at about 75 percent, the current rate of specifications was sufficient to produce strong conditions. The record steel tonnage of August was considered safely in progress of consumption and production during September bids fair to go to a new high record. The price trend in all steel products was unmistakably upwards, and there was a determination on the part of producers to obtain $2 per ton more for the last quarter of the year. This has driven in some business although stocking up of the character known prior to 1921 was negligible.

Creosote Oil.—A lively rate of consumption continued in progress last week. In addition to the heavy contract movement which was in progress, at basis of 17c. to 18c. per gallon for the grade I, and 14c. to 15c. per gallon for grades 2 and 3 all in tanks, While demand was about normal for this season producers were encountering no difficulty in taking care of it.

Tar Acid Oil.—There was nothing unusual about the course of last week's market. The 15 percent was being quoted at 26c. to 27c. per gallon in drums, and the 25 percent at 29c. to 30c. per gallon in drums.

Toluene (Toluol).—The producers were forced to turn down additional orders for September delivery, as demand from lacquer materials manufacturers and other consumers was along broad enough lines to account for the entire production. The contract market remained on a basis of 35c. per gallon tanks works, and 40c. drums, works.

Xylene (Xylol).—A much livelier demand from printing ink manufacturers together with a substantial increase in the call from the rotogravure industry as well as from some lacquer materials manufacturers who were experiencing a big demand for leather dope was a conspicuous feature of this product last week. The producers had not changed their quotations of 30c. per gallon for the commercial grades in tanks and 35c. in drums, while 10 degrees was quoted at 33c. tanks, and 38c. drums, with 5 degrees held at 40c. tanks and 45c. drums, and nitration at 50c. tanks and 55c. drums.

Chicago Coaltar Bases

CHICAGO, Sept. 14.—There was a continuing good demand for most of the products in the Chicago coaltar materials market, with prices firm in practically all instances. A good motor fuel demand continues for the benzene material. Solvent naphtha was unchanged after being softer for some time. Ruling prices (tankcar, per gallon) are:—Benzene, 22c.; toluene, 36c.; xylene, 35c.; solvent naphtha, 30c.

Intermediates

Anilin Oil.—Steady conditions ruled in this product last week. Demand was beginning to show an increase at the more attractive price basis of 14½c. per pound, tank works and 15c. per pound, drums, works. The British markets remained on a steady basis.

Benzaldehyde.—A fair amount of buying continued to feature this intermediate. Producers had not changed their price views but were quoting 60c. to 65c. per pound for the technical grade in drums, $1.15 to $1.20 for the IX U. S. P. and $1.25 to $1.30 for the U.S.P. X.

Chlorobenzene.—The contract price basis was continued at 8½c. to 9½c. per pound in drums. Producers reported that the dye trade were taking hold in somewhat better volume.

Dinitrophenol. — No occasion for changing their price views was reported by any of the producers. They indicated that contract withdrawal demand was continuing about up to recent totals.

Dimethylanilin.—No occasion for revising the condition of this product

Valuable information on Imports and Exports of Coaltar Products is given in port lists beginning on page 5.

Coast to Coast Producing Points

Barrett Standard

TANK-WAGON DELIVERIES
of
COMMERCIAL 90% BENZOL
COMMERCIALLY PURE BENZOL
COMMERCIALLY PURE TOLUOL
SOLVENT NAPHTHA
COMMERCIAL XYLOL
in
BOSTON

Phone or communicate with
Mr. Blood, The Barrett Company, Boston
Tel. Haymarket 6020

The Barrett Company
Ammonia-Benzol Department
40 Rector Street New York, N. Y.

Coast to Coast Distributing Points

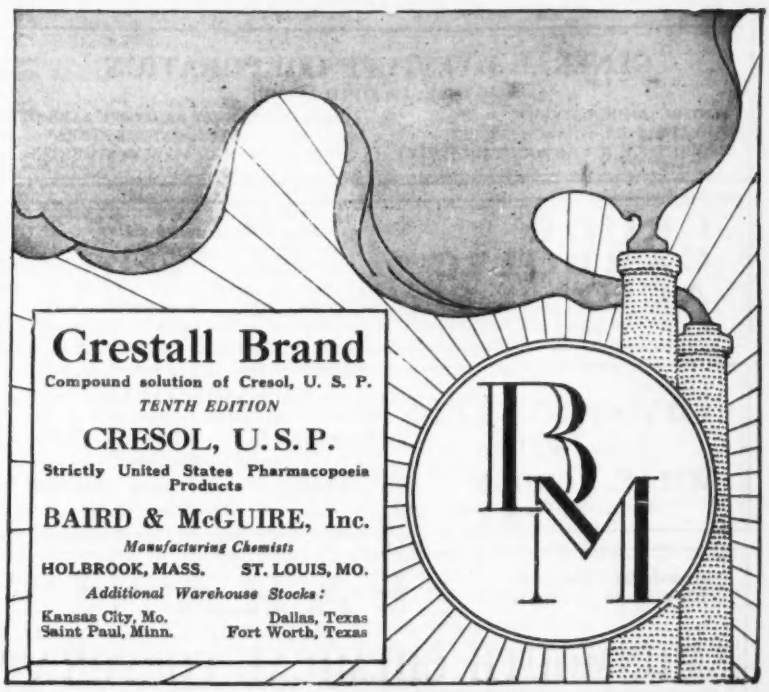
OIL OF MYRBANE
ANILINE OIL

Acetic Acid, Sulphuric Acid, Nitric Acid, Aqua Fortis, Muriatic Acid, etc., etc.

MANUFACTURED BY

The Naugatuck Chemical Company

NAUGATUCK CONNECTICUT



came under review last week. The producers remained firm in their views quoting 27c. to 28c. per pound in drums.

Hexalin.—The amount of business passing in this product was well up to recent averages. Conditions generally appeared to be quite firm.

Monochlorobenzene.—Firm conditions continued to rule in this item last week. Producers were holding it for 10c. to 10½c. per pound in drums.

Nitrobenzene.—A moderate amount of new business was taken by the producers at last prices of 9½c. to 11c. per pound in drums.

Nitrotoluene.—This division had not changed last week. The producers were holding the item for 16c. to 18c. per pound in drums.

Orthoaminophenol.—A fair amount of trade came under review last week. Prices remained on a basis of $2.15 to $2.25 per pound in barrels.

Orthotoluidin.—A steady condition persisted in this item, producers adhering to last prices of 25c. to 29c. per pound in drums.

Paranitroanilin.—In the anticipation of higher contract prices which were expected would be announced as of October 15th there was an advance of 3c. per pound in the spot basis establishing the product at 55c. per pound. Contracting was quite active last week, one contract calling for some 130,000 pounds having been placed. Early this year contracts had been taken in this product on the basis of 45c. to 48c. per pound. At present no goods are available on contract under a basis of 48c. per pound. The spot market was nearly cleared and the outside market was being scoured for supplies. Those who were not covered on contract were paying 55c. per pound.

Paraphenylenediamine.—This product reflected the strong conditions ruling in some of its constituents. Producers were holding it for $1.15 to $1.20 per pound in barrels.

Phthalic Anhydride.—Since the producers had sold their output ahead an extremely firm situation was reported to be ruling in this item. The regular contract quotations of 20c. to 21c. per pound for the refined and 18c. per pound for the technical in barrels were being maintained, however.

Coaltar Acids

Anthranilic.—While jobbing demand was a little better, there was not enough change in the market outlook to warrant any change from the ruling price basis of 98c. to $1 per pound for the refined grades.

Benzoic.—Little apart from routine contract business was accomplished in this division last week. Producers were continuing their quotations of 57c. to 58c. per pound for the technical grades in kegs and 60c. to 61c. for the U.S.P.

Chlorosulphonic.—Prices were continued at 4½c. to 5½c. per pound in drums.

Cleve's.—No changes from the ruling price of 52c. to 54c. per pound in barrels came under review last week.

Gamma.—Prices were steady at 97c. to 99c. per pound in barrels.

Laurent's.—The quotation was steady at 40c. to 42c. per pound in barrels.

Monosulphonic.—Some members of the dye trade were buying a little more freely.

Neville and Winther's.—The volume of shipments against resting contracts appeared to be holding up fairly well. There was no suggestion of any departure from the recent character of trading though.

Picric.—The widespread demand for the lighter shades made for continued activity in this product. The quotation for car lots remained at 30c. per pound in barrels, and for smaller quantities up to 40c. to $1 per pound was quoted.

Coaltar Colors

The steadily rising trend of textile operations in New England and other important textile centres is resulting in a seasonal improvement in the demand for the general run of coaltar colors. The resumption of mill operations has gradually placed the textile industry in a more favorable light and as a result contract shipments in the various anilin colors are gradually beginning to resume normal proportions. While the market was still competitive it had not varied greatly in the matter of prices. Fair arrivals have been witnessed within the past few weeks, including 13 casks of alizarin colors from Holland, as well as 13 kegs, 402 casks, 28 drums, 9 cases, 46 jugs and 32 packages of anilin colors from the United Kingdom, Holland and France.

Current Prices

(For late price changes, see page 2)

Basic Products

Benzene (benzol), 90 p.c., works, drums	gal.	.27 @	.28
tanks	gal.	.22 @	.23
nitration, works, drums	gal.	.30 @	—
tanks	gal.	.25 @	—
pure, works, drums	gal.	.27 @	.28
tanks	gal.	.22 @	—
Carbazole, barrels	lb.	.45 @	.50
Coaltar, barrels	bbl.	9.00 @	9.50
Creosote oil, grade I, works, tanks	gal.	.17 @	.18
II, works, tanks	gal.	.14 @	.15
III, works, tanks	gal.	.14 @	.15
Cresol, U.S.P., drums	lb.	.14 @	.17
Cresylic acid, 95@97 p.c., dark drums	gal.	.70 @	.72
97@99 p.c., pale, drums	gal.	.72 @	.75
Dip oil, 25 p.c., drums	gal.	29 @	—
Naphthalene, ball, barrels	lb.	06 @	.07
crude, bags	lb.	.02¼@	.02⅜
dyestuff, bags	lb	.04½@	.05
flake, barrels	lb.	.05 @	.06½
Orthocresol, drums	lb.	.18 @	.28
Phenol, U.S.P., works, car lots, 250-lb. drums	lb.	.13¼@	—
Pyridin, drums	gal.	1.35 @	1.50
Solvent naphtha, water white, works, drums	gal.	.35 @	—
tanks	gal.	.30 @	—
Tar Acid oil, 15 p.c., drums	gal.	.26 @	.27
25 p.c., drums	gal.	29 @	.30
Toluene (toluol), pure, works, drums	gal.	.40 @	—
tanks	gal.	.35 @	—
Xylene (xylol), 5 deg., works, drums	gal.	.45 @	—
tanks	gal.	.40 @	—
10 deg., works, drums	gal.	.38 @	—
tanks	gal.	.33 @	—
commercial, works, drums	gal.	.35 @	—
tanks	gal.	.30 @	—
nitration, works, drums	gal.	.55 @	—
tanks	gal.	.50 @	—

Acids

Anthranilic, refined, barrels	lb.	.98 @	1.00
technical, barrels	lb.	.80 @	—
Benzoic, technical, kegs	lb.	.57 @	.58
U.S.P., kegs	lb.	.60 @	.61
Broenner's barrels	lb	1.25 @	—
Chlorosulphonic, drums	lb.	.04½@	.05½
Cleve's, barrels	lb.	.52 @	.54
Gamma, barrels	lb.	.97 @	.99
H, barrels	lb.	.68 @	.72
Laurent's, barrels	lb.	.40 @	.42
Monosulphonic, barrels	lb.	1.65 @	1.70
Naphthionic, barrels	lb	No stocks	
Neville and Winther's, barrels	lb.	.85 @	.87
Phenylcinchoninic, tins	lb.	4.70 @	5.00
Picramic, kegs	lb.	.65 @	.70
Picric, car lots, barrels	lb.	.30 @	—
less than car lots	lb.	.40 @	1.00
Salicylic, technical, barrels	lb	.37 @	.42
U.S.P., barrels	lb.	.40 @	.45
Sulphanilic barrels	lb.	.15 @	.16
Tobias, barrels	lb.	.85 @	—

Intermediates

Alphanaphthol, refined, bbls	lb.	.80 @	.85
technical, barrels	lb.	.60 @	.65
Alphanaphthylamine, barrels	lb	.32 @	.34
Anilin oil, drums	lb.	.15 @	.16
tanks	lb.	.14½@	.15
Oil for red, drums	lb	.38 @	.40
salt, barrels	lb	.24 @	.26
Anthraquinone, 99.5 p.c., sublimed, kegs	lb	.80 @	.90
Benzaldehyde, technical, drums	lb.	.60 @	.65
U.S.P., IX, drums	lb.	1.15 @	1.20
U.S.P., X, drums	lb.	1.25 @	1.30
Benzidin, base, barrels	lb.	.67 @	.74
Benzoyl chloride, drums	lb.	1.00 @	1.05
Benzyl chloride, 96@97 p.c., refined, drums	lb.	.80 @	.85
technical, drums	lb.	.25 @	—
Betanaphthol, sublimed, barrels	lb.	.55 @	.60
technical, car lots	lb.	.22 @	—
less car lots	lb.	.24 @	—
Betanaphthylamine, sublimed, kegs	lb.	1.25	Nom.
technical, kegs	lb.	.65 @	.68
Chlorobenzene, drums	lb.	.08¼@	.09⅛
Dianisidin, barrels	lb.	2.80 @	—
Diethylanilin, drums	lb.	.55 @	.60
Diethylorthotoluidin, drums	lb.	.64 @	.67
Dimethylanilin, drums	lb.	.27 @	.28
Dinitrobenzene, barrels	lb.	.15½@	.16½
Dinitrochlorobenzene, barrels	lb.	.13 @	.14
Dinitronaphthalene, kegs	lb.	.35 @	.38
Dinitrophenol, barrels	lb.	.30 @	.34
Dinitrotoluene, drums	lb.	.17 @	.18
Diphenylamine, barrels	lb.	.42 @	—
Ethylidin anilin, drums	lb.	.60 @	.65
Ethylbenzylanilin, drums	lb.	.97 @	1.00
G salt, barrels	lb.	.50 @	.52
Hexalin, drums	lb	.60 @	—
Metanitroanilin, kegs	lb.	.72 @	.78
Metanitroparatoluidin, barrels	lb.	1.70 @	1.80
Metaphenylenediamine, kegs	lb.	.84 @	—
Metatoluylenediamine, kegs	lb.	.70 @	—
Methylanthraquinone, kegs	lb.	.85 @	.95
Michler's ketone, kegs	lb.	3.00 @	3.50
Mixed toluidin, drums	lb.	.30 @	—
Monochlorbenzene, drums	lb.	.10 @	.10⅛
Monoethylanilin, drums	lb.	1.05 @	1.08
Monoethylorthotoluidin, drums	lb.	.70 @	.75
Monomethylparaminosulphate, drums	lb.	3.75 @	4.00
Nitrobenzene, drums	lb.	.09½@	.11
Nitronaphthalene, barrels	lb.	.25 @	—
Nitrotoluene, drums, works	lb.	.14 @	.15
Orthoaminophenol, barrels	lb.	2.15 @	2.25
Orthoanisidin, barrels	lb.	2.50 @	2.75
Orthochlorphenol, drums	lb.	.50 @	.65
Orthodichlorobenzene, drums	lb.	.08 @	.10
Orthonitrochlorobenzene, kegs	lb.	.30 @	.32
Orthonitroparachlorphenol, tins	lb.	.70 @	.75
Orthonitrophenol, kegs	lb.	.85 @	.90
Orthonitrotoluene, drums	lb.	.16 @	.18
Orthotoluenesulphonate, kegs	lb.	2.00 @	2.05
Orthotoluidin, drums	lb.	.25 @	.29
Para-aminoacetanilide, kegs	lb.	1.05 @	1.10
Para-aminophenol base, barrels	lb.	1.00 @	1.03
hydrochloride, barrels	lb.	1.25 @	1.30
Parachlorphenol, drums	lb.	.50 @	.65
Paradichlorobenzene, drums	lb.	.18 @	—
Paranitroacetanilide, kegs	lb.	.52 @	.54
Paranitroanilin, kegs	lb.	.55 @	—
Paranitrochlorobenzene, kegs	lb.	.23 @	.28
Paranitrophenol, kegs	lb.	.55 @	.57
Paranitrotoluene, kegs	lb.	.29 @	.31
Paraphenylenediamine, barrels	lb.	1.15 @	1.20
Paratoluenesulphonamide, barrels	lb.	.76 @	.78
Paratoluidin, casks	lb.	.38 @	.42
Phthalic anhydride, refined, barrels	lb.	.20 @	.21
technical, barrels	lb.	.18 @	—
R salt, barrels	lb.	.44 @	.48
Resorcinol, technical, cans	lb.	1.25 @	1.30
Schaeffer's salt, kegs	lb.	.53 @	.57
Sodium metanilate, kegs	lb.	.70 @	.75
naphthionate, bottles	lb.	.55 @	.57
picramate, kegs	lb.	.69 @	.72
Tetralin, drums	lb.	.20 @	—
Thiocarbanilide, drums	lb.	.23 @	.24
Toluidin base, kegs	lb.	.86 @	.90
distilled	lb.	.91 @	.95
Xylidin, drums	lb.	.27 @	.29

Coaltar Colors

Color Index No.		Per pound.		
10	Naphthol yellow S	1.35 @	1.40	
20	Chrysoidine Y	.50 @	.55	
24	Sudan I	1.00 @	1.25	
27	Orange G	.60 @	.75	
31	Amido naphthol red G	.50 @	.55	
36	Chrome yellow 2G	.65 @	.70	
40	Chrome yellow R	.50 @	1.00	
53	Victoria violet	.80 @	1.00	
57	Amido naphthol red 6B	.35 @	.40	
73	Sudan II	1.00 @	1.25	
79	Ponceau 2R	.50 @	.60	
88	Bordeaux B	.90 @	.95	
138	Metanil yellow	.70 @	.80	
151	Orange II	.25 @	.35	
165	Lake red C	1.15 @	1.25	
176	Fast red A	.65 @	.75	
179	Azo rubine	1.00 @	1.05	
180	Fast red VR	1.50 @	1.65	
189	Lake red R, paste	.85 @	.90	
189	Lake red R, powdered	3.00 @	3.10	
202	Chrome blue black U	.45 @	.50	
204	Chrome black A	1.75 @	2.00	
208	Fast acid blue R	.75 @	2.00	
216	Chrome red B	1.75 @	2.00	
234	Resorcin brown B	.75 @	.80	
235	Resorcin dark brown	.75 @	.80	
246	Acid black 10B	.50 @	.70	
252	Brilliant croceine	.90 @	1.00	
258	Sudan IV	1.00 @	1.25	
262	Cloth red 2B	.60 @	.80	
289	Fast cyanine 5R	.90 @	1.00	
299	Chrome black F	.45 @	.50	
307	Fast cyanine black B	.80 @	.85	
326	Direct fast scarlet	2.00 @	2.25	
331	Bismarck brown	.40 @	.45	
332	Bismarck brown 2R	.40 @	.45	
364	Paper yellow	.50 @	.90	
365	Chrysophenine G	.50 @	.60	
382	Direct scarlet B	2.00 @	2.10	
387	Direct violet B	1.00 @	1.30	
394	Direct violet N	1.25 @	1.30	
401	Developed black BHN	.80 @	1.00	
406	Direct blue 2B	.25 @	.30	
415	Direct orange R	.75 @	.90	
419	Direct fast red F	.75 @	.85	
420	Direct brown M	1.00 @	1.15	
448	Benzo purpurine 4B	.35 @	.50	
495	Benzo purpurine 10B	.50 @	.75	
502	Direct azurine G	.75 @	.80	
512	Direct blue RW	.80 @	1.00	
518	Direct pure blue 6B	1.10 @	1.25	
520	Direct pure blue	.25 @	3.00	
539	Direct fast black FF	.75 @	1.00	
581	Direct black EW	.25 @	.50	
582	Direct black RX	.35 @	.45	
593	Direct green B	.75 @	.90	
594	Direct green G	1.00 @	1.05	
596	Direct brown 3GO	.35 @	1.00	
620	Direct yellow R	1.25 @	1.50	
636	Fast light yellow 2G	3.00 @	3.25	
666	Acid Green B	1.50 @	1.75	
680	Methyl violet	2.00 @	2.25	
698	Acid violet	1.00 @	3.00	
793	Phosphine	1.50 @	1.55	
812	Primuline	.80 @	.90	
814	Direct fast yellow	2.00 @	2.25	
865	Nigrosine (water soluble)	.50 @	.55	
	Sulphur black	.20 @	.25	
	Sulphur blue	.50 @	1.50	
	Sulphur brown	.50 @	1.00	
	Sulphur maroon	.80 @	1.25	
	Sulphur olive	.25 @	.50	
	Sulphur tan	.50 @	1.00	
	Sulphur yellow	.75 @	2.00	
1177	Indigo, 20 p.c. paste	.15 @	.18	
	Benzo fast black L	1.00 @	2.00	
	Zambesi blacks	.75 @	1.00	

Coaltar Colors

Color Index No.		Per pound.		
	Sulphur blue	.50 @	1.50	
	Sulphur brown	.50 @	1.00	
	Sulphur maroon	.80 @	1.25	
	Sulphur olive	.25 @	.50	
	Sulphur tan	.50 @	1.00	
	Sulphur yellow	.75 @	2.00	
1177	Indigo, 20 p.c. paste	.15 @	.18	
	Benzo fast black L	1.00 @	2.00	
	Zambesi blacks	.75 @	1.00	

Larvex Co. Wins Against Registration of Larvatox

WASHINGTON, Sept. 10, 1928.

The United States Patent Office has upheld the Larvex Corporation, Brooklyn, N. Y., in its opposition to the attempt of Peter G. Walter, Pittsburgh, to register the word "Larvatox" as a trademark for an insecticide. The Larvex Corporation contended that this word was so similar to its trade mark "Larvex," used on the same commodity, as to cause confusion. This contention was not upheld, Assistant Commissioner M. J. Moore declaring that there is sufficient difference in the words to distinguish them with ease. However the word "Larvatox" was held to be simply a combination of the words "larva" and "toxin," and therefore descriptive and not registerable as a trade mark.

Argentine Quebracho Trade

During the first six months of 1928 Argentina exported 87,381 tons of quebracho logs and 146,018 tons of quebracho extract, as compared with 57,238 tons and 140,180 tons in the first half of last year, according to the United States Department of Commerce. Of the exports this year 38,632 tons of logs were sent to the United States, as well as 29,201 tons of extract.

Germany took more of the extract than the United States, 36,753 tons, but less of the logs, 11,163 tons. Belgium imported 16,452 tons of logs and 7,865 of the extract, France, 14,685 tons of logs and 9,186 of extract, Holland, 3,374 of the logs and 9,686 of extract, Italy 2,402 of logs, and 6,443 of extract, while the United Kingdom took no logs but 16,205 tons of extract. Other countries took 683 tons of logs and 30,679 tons of extract.

Tannic Acid Imports, 1927

Tannic acid imports into the United States during 1927 showed approximately a 25 percent decrease over the amount brought in during the preceding year, and a 20 percent increase over 1925. The following table shows the quantities and values of "tannic acid, tannin and extract of nutgalls" entered for consumption during the past two years:—

	1926 Pounds.	1926 Value.	1927 Pounds.	1927 Value.
Less than 50% tannic acid	90,525	$12,076	72,762	$10,046
50% or more tannic acid (not medicinal)	92,422	24,702	58,204	17,099

Domestic production, according to the Bureau of the Census, amounted in 1925 to 1,439,957 pounds of tannic acid, valued at $585,951. This compares with 969,541 pounds in 1923, valued at $357,023, and 717,977 pounds in 1921, having a value of $286,869.

Warners Visit Wisconsin To Boost Mission Work

Franklin H. Warner, president of the Warner Chemical Company, this city, and Mrs. Warner left September 7 for an automobile tour in Wisconsin, during which they will give many talks in behalf of foreign missions.

Mr. Warner is a member of the executive committee of the National Council of Congregational Churches, a director of the Congregational foreign mission board, president of the board of Yenching University in Pekin, China, and treasurer of Talladega College for Negroes in Alabama and of Madura College, India.

Indian Tariff Pleas

The Government of India has referred to its tariff board claims for the protection of the following chemicals according to United States Consul Wilbur Koblinger, Bombay:—Sulphuric acid, hydrochloric acid, nitric acid, epsom salt, coppers, potash alum, aluminum sulphate, zinc chloride, blue vitriol and glauber's salt.

The tariff board will also investigate the question of removing the import duty on certain chemicals which are utilized as raw materials in Indian industres.

H. W. Haines, of the sales department of the United States Industrial Chemical Company, this city, is spending his vacation in New Jersey.

Ralph D. Buck, of the chemical sales department of the Grasselli Chemical Company, this city, is spending his vacation touring New York State.

A. L. Mullaly, director of sales for Kuttroff, Pickhardt & Co., sailed for Europe on the "Majestic" September 14. He will visit France, Germany and England.

A. D. Stuck, manager of the Monmouth Chemical Corporation, has left on an extensive business trip which will carry him through California and British Columbia. He will be away until the end of the month.

GENERAL DYESTUFF CORPORATION
NEW YORK, 230 FIFTH AVENUE
BOSTON, 159 HIGH STREET
PHILADELPHIA, 111 ARCH STREET
PROVIDENCE, R. I., 40 FOUNTAIN STREET
CHICAGO, 305 WEST RANDOLPH STREET
SAN FRANCISCO, 22 NATOMA STREET
CHARLOTTE, N. C., 220 W. 1st STREET

CRUDE CARBOLIC ACID
20%-25% and 10%-15%
Wood-Preserving Oils
Shingle Stain Oils
Coal Tar Products
Distilled by
KENTUCKY COLOR & CHEMICAL CO.
Louisville Incorporated Kentucky

Cresylic Acid
ALL GRADES
WM. E. JORDAN & BROTHER
CREOSOTE OILS
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Cresol U.S.P. Phenol U.S.P.
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Alexander, Jerome

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and
Chemical Engineer

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Petroleum Gossip

Fred H. Bartlett, Chicago, has been elected a director of the Sinclair Consolidated Oil Company.

Frank E. Kistler, president of the Frank E. Kistler Oil Company, Denver, has returned from a trip to Europe.

The Humble Oil & Refining Company plans to double the capacity of its 20,000 barrel skimming plant at McCamey, Texas.

Crude oil production on government lands in Colorado during July totaled 98,111 barrels, an increase of 12,724 barrels over the preceding month.

Clyde G. Wann, of the Yukon Exploration Company, Ltd., came down from the Alaskan oil lands early in September to stay a while in Denver.

Cosdon & Co. is assembling material for the building of a twelve-mile pipeline from its Howard county, Texas, properties to its refinery at Big Springs.

The Colon Development Company, now the Colon Oil Corporation, which has had men drilling for several years in the Tarra district of Venezuela, is ready to run its pipeline to the mouth of the Catatumbo River.

In the week ended September 7, Lago Oil & Transport Corporation produced 661,593 barrels or 94,513 daily, a new peak against 576,558 barrels the week before and 376,140 barrels in the similar week of 1927.

The Lago Oil & Transport Company will erect a 30,000 barrel skimming plant on the Island of Arubo in the Dutch West Indies. It will cost about $4,000,000.

The Midwest Refining Company September 5 completed its well on the Hobbs High structure, Lea County, N. M., at 4,165 feet, making 365 barrels of 33 gravity oil daily.

The Pennsylvania Independent Oil Men's Association will hold its fall convention at the Harris Hotel, Harrisburg, Pa., October 15 to 17. R. A. Overholzer is secretary.

The Indian Refining Company, after many months of experimentation and preparation, has begun operation of its new vacuum process lubricating oil plant at Lawrenceville, Ill.

B. G. Shepard, president of the Inter-State Oil Company, Kansas City, is on an extensive vacation trip through the east, visiting relatives in Virginia and Connecticut.

The Colorado Metal Mining Fund has guaranteed $15,000 for the year ending July 1, 1929, to be used by the United States Geological Survey in a geological mapping of Colorado.

The Spanish government has had to spend 140,000,000 pesetas on appropriations for the petroleum monopoly instead of the 90,000,000 pesetas provided for, which upsets the original calculations as to the profits, and, added to the cost of the new refineries, can hardly fail to lead to higher prices for petroleum products in Spain.

The Mid-Continent Petroleum Corporation has completed Well No. 1 on the Guinn lease in the St. Louis Pool, Oklahoma flowing at the rate of 3,840 barrels of high gravity oil daily.

It is proposed to increase the Peruvian federal consumption tax on gasoline from 10 centavos to 30 centavos per gallon, according to the United States Department of Commerce.

The Northwestern Royalties, Inc., Craig, Colo., has purchased royalty interests in 1,992 acres in five structures located on Iles, Poose Creek, Bell Rock, Morapos and Dry Lakes domes.

The Continental Oil Company will purchase the plant of the Valley Refining Company at Pyote, Ware county, West Texas. The plant is to be enlarged up to about 2,500 barrels daily.

The Polish government intends to form an oil cartel, introduce a sales monopoly and nationalize all pipe lines according to a Central News cable from Warsaw to the New York News Bureau. The government may repeat its proposals to Standard Oil interests to buy the establishments.

Texas Pipe Line Company is now welding by electricity its new pipeline from Olney station in Young county, Texas, ot the South Bend main line through which it will discharge crude into the South Texas artery at Ranger. The new line will use 8-inch pipe and will be 30 miles long. It connects with the North Archer line and will also run crude from the Wilbarger pool and relieve congested conditions in that area.

R. F. Bixler has been appointed manager at Kankakee, Ill., for the Johnson Oil Refining Company, Chicago. Formerly he was a partner in and manager of the Elkhart Oil Company, Elkhart, Ind.

The Phillips Petroleum Company has completed No. 2 Well on the Stahl lease, St. Louis Pool, Pottawatomie County, Okla., for 8,000 barrels daily initial. Wilcox sand was found at 4,118 feet and was drilled to a total depth of 4,186 feet.

The Sweeney Gasoline & Oil Company, Peoria, Ill., has purchased the Henry Oil Company, Henry, Ill., and the Hamilton Oil Company, Wyanet, Ill. The property includes two bulk oil stations and a number of service stations and outlet pumps.

The Pure Oil Company has opened another pool in the Seminole area of Oklahoma with its well in Section 18-8-5, four miles north of the St. Louis Pool, which made 2,520 barrels in seventeen hours from the Meisner sand which was topped at 4,097 feet and drilled to 4,115. The Meisner horizon overlies the Wilcox sand.

A. B. Patterson, production manager for the Texas Company, Denver, met with Chicago and Northwestern Railroad Company officials at Riverton, Wyo., August 30, and it was agreed that loading racks will be built at Riverton. Oil from the Texas Company's Alkali Butte structure will be trucked to the racks. Should the production warrant it a pipeline to connect the field with Casper will be built.

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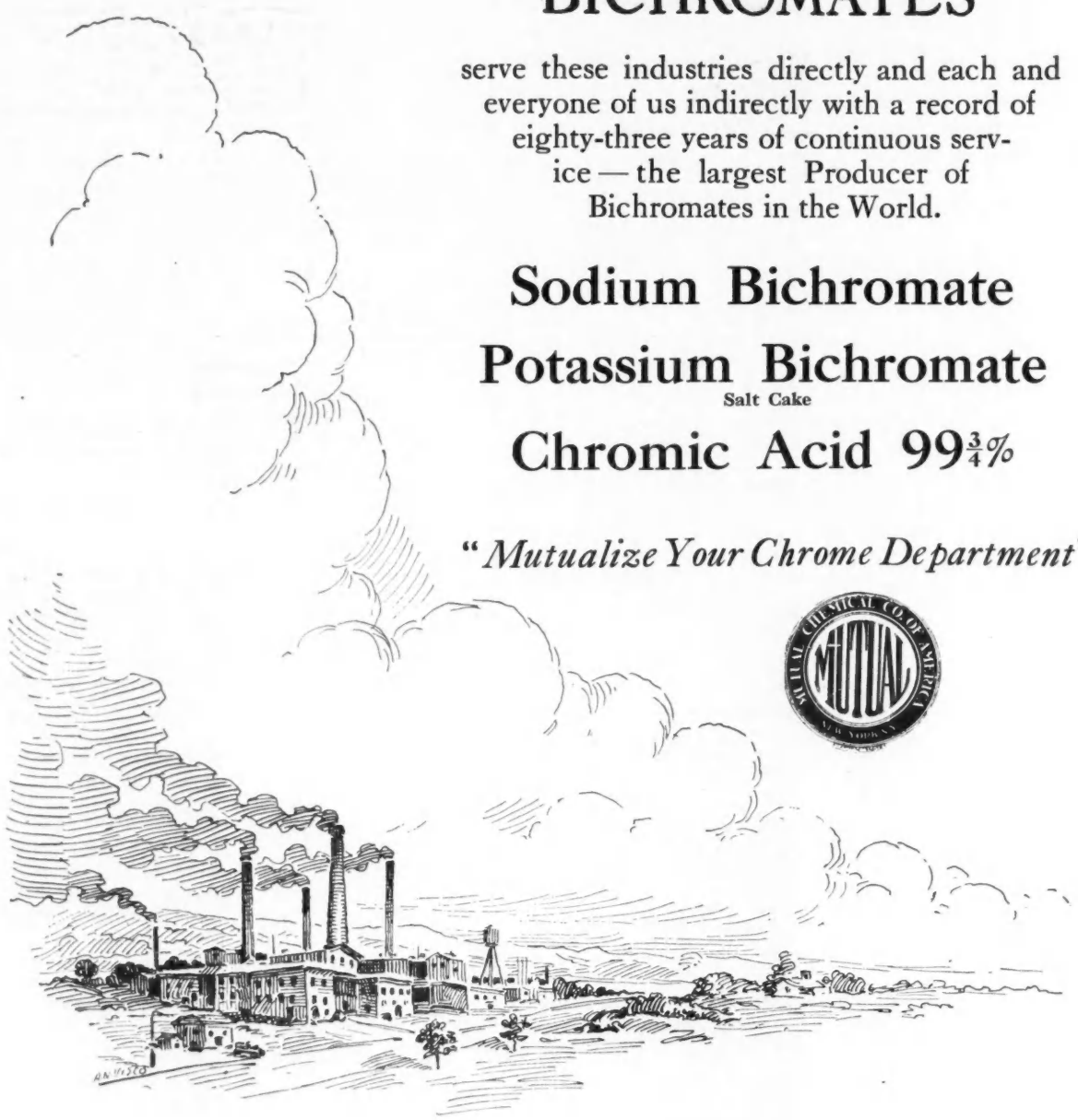

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Valonia and Wattle Bark Reduced Sharply by Primary Market Shippers—Egg Spray Lower—Cochineal Quite Scarce

A number of natural materials utilized for tanning operations showed a weaker undertone last week as a result of the prolonged absence of consumers from the market. The most noteworthy cut was that in wattle bark, which was $3 per ton lower for shipment. Valonia beards underwent a rather sharp decline of $2 per ton as offers from primary market points in Asia Minor increased. While there was not much buying of other tanning or dyeing materials, the tone in most of the products continued steady to firm, as primary market shippers had shown no deviation from their previous price views.

Chinese egg products began to show a gradual decline with the advent of larger shipments from the Orient. Close to $2,400,000 worth of Chinese egg products entered the country in the first six months of this year, against less than $500,000 in the corresponding period of the year before. Corn starches and dextrin maintained a decidedly firm position last week, reflecting the strong position of spot corn. In the long run, however, it is expected that the tone of the corn market will turn reactionary, as the yield of corn promises to be some 157,000,000 bushels greater than it was a year ago.

Consumers were renewing contracts for the bichromates as they ran out at the higher price levels announced the first of the year. A steady contract movement was in progress and the outlook generally concerned itself mostly with the probability that new contract prices for next year would be announced within the course of another month. The list of natural dyestuffs was featured by decidedly strong conditions ruling in cochineal. Shippers in the Canary Islands were securing better prices for the product from European buyers than they were here; hence stocks were extremely limited.

Current prices on dyestuffs and tanstuffs, formerly printed on page 12, are now printed at the end of this market report.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced
Cochineal, Teneriffe silver, 9c. per lb.	Egg spray, 2c. per lb. Valonia beards, $2 per ton Wattle bark, $3 per ton

Comparative Values

Index numbers compiled from nineteen typical dyestuffs and tanstuffs on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
157.8	157.8	158.1	169.7

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Chemicals

Aluminum Chloride.—Conditions underwent no substantial change during the course of last week's trading. Prices for the metal were being maintained at 24.30c. per pound and hence there continued a steady tone in aluminum chloride which was held for 3c. to 3¼c. per pound in drums at the works.

Antimony Salt.—Since the metal was being quoted at 10⅜c. per pound spot duty paid f.o.b. this city and since futures were quoted at 10⅛c. to 10¼c. per pound duty paid this city, there was no suggestion of any immediate change in the quotation for the 66 percent salt which was being maintained at 25½c. to 26c. per pound in tins.

Potash Bichromate.—Deliveries were keeping well abreast of the totals of a year ago. In addition to the regular contract movement which was in progress on the basis of 8¾c. per pound car lots casks, and 9c. per pound for smaller quantities there was a fair miscellaneous demand for additional quantities. In fact, the expectation that 1929 contract prices might be announced within the course of another month made for a somewhat better inquiry for new business.

Soda Bichromate. — Trade was with the advent of resumption of Fall trade.

Camwood.—The ground bark was being maintained in leading trade quarters at 18c. per pound. Demand at this level was well up to recent averages.

Cochineal.—The product was being quite firmly held in all quarters of the trade following a recent jump in shipment prices from the Canary Islands to a basis of $1 per pound. The gray was in limited supply and was being quoted at 95c. per pound in bags. The price of 95c. per pound was also being quoted on the Teneriffe silver grade. The black kinds had been pretty well used up and prices were reported as nominal.

Fustic.—Since a steady and continuous import movement was in progress in fustic sticks on the basis of $25 to $26 per ton for shipment there had been no interruption to the regular contract movement in the extracts. Prices for the latter were firm at 7c. to 9c. per pound for the 42 degrees liquid extract and 8c. to 10c. for the 51 degrees extract. The regular crystal extract was quoted at 18c. to 22c. per pound in barrels, and the solid at 14c. to 16c. per pound in drums.

Hypernic.—Shipments were coming through from the Latin American markets in fair volume. Producers were quoting the solid at 17c. to 20c. per pound in drums and the 51 degrees liquid at 11c. to 15c. per pound in barrels.

Indigo.—Shipments both of the paste and the synthetic liquid were holding up well. Producers of vat indigo 20 percent were making satisfactory shipments on the basis of 15c. per pound.

Logwood.—These dyes were meeting the usual amount of contract buying. The market was a decidedly firm one. Haitian sticks were firm at $24 to $25 per ton for shipment in bags.

Madder, Dutch.—The market had a steady tone, prices being repeated on the basis of 22c. to 25c. per pound in bags.

Osage Orange.—This coloring material met a satisfactory amount of general buying. The price of the 61 degrees liquid extract was 6¾c. to 7¼c. per pound in barrels.

Quercitron.—The usual amount of routine contract buying made itself felt in this division last week. The 51 degrees was quoted at 5½c. to 6c. per pound in barrels and the solid at 9½c. to 10c. per pound in drums.

Sizing Materials

Albumen.—The producers had not further changed their quotations of 43c. to 48c. per pound for the blood in barrels, nor 80c. to 85c. for the edible egg in cases. According to a report by Consul H. L. Milbourne, Hankow, for the month of June, 1928, prices for hen albumen ranged during June from 53 to 55 cents, United States currency, per pound, and for spraying hen yolk from 49c. to 50½c., United States cur-

Valuable information on Imports and Exports of Dyestuffs and Tanstuffs is given in port lists beginning on page 5.

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rency, per pound, c.i.f. New York. Duck albumen was down to 43½c. These prices are slightly less than corresponding prices during May, the difference being due chiefly to the difference in exchange. Egg prices were a shade easier, but arrivals from the interior were small owing to the fact that the season is about over. Declared exports of egg products from Hankow to the United States increased in value from $397,106. United States currency, in May to $1,118,944 in June. For the half year ended June 30, 1928, the declared exports were valued at $2,359,658, United States currency, as compared with $454,618 for the corresponding period of the preceding year.

Dextrin.—While a comparatively firm price basis was reported to be continuing, British gum being maintained at $5.02 to $5.22 per 100 pounds, while corn dextrin was held at $4.77 to $4.97 per 100 pounds, suggestions were not lacking that the tone of the market might become reactionary with the advent of the harvesting of the new crop. Gains of about 2¼c. per bushel were scored in corn prices during the week on issuance of the report by the Department of Agriculture that the September 1 condition was 2,930,586,000 bushels, compared with 3,029,561,000 bushels indicated in the previous month and 2,773,708,000 bushels harvested a year ago. As this showing was about 100,000,000 bushels below private expectations, there was general buying and covering of corn futures.

Egg Yolk.—A somewhat easier tone appeared last week in spray, which was being offered down to 74c. to 76c. per pound. No change was noticeable in granular yolk, which was being held at 68c. to 70c. per pound in cases. Recent data from Shanghai anent these products indicate that dried whole egg and dried yolk shipments are larger than last year and dried albumen smaller. Current price quotations c.i.f. Atlantic Coast on June 21, 1928, were, spray yolk, 47c. and dry albumen 54c. per pound. Recent receipts included about 177,000 pounds from China.

Sago Flour.—New developments were absent from the market last week. Dealers continued to offer at old price limits of 4½c. to 5½c. per pound in bags.

Starches.—Much the same firm conditions that ruled in the market for dextrins were notable in this division. The estimate of the Department of Agriculture that the condition of the corn crop was some 100,000,000 bushels smaller as of September 1 than had been indicated in private estimates made for a somewhat more bullish feeling in the grain, but the feeling persisted that eventually there would be another substantial price depreciation, especially since supplies of the grain were soon expected to be piling up in graneries. The receipts of potato and rice starches from Norway and Holland were showing increases.

Tapioca Flour.—The receipt of upwards of 13,000 bags and about 213 cases from Java here and at Boston was a feature of the market during the course of last week's trading. Dealers continued to offer on the basis of 3¼c. to 5½c. per pound in bags.

Tanning Materials

Chestnut.—There was no suggestion of any early change in the position of this product during the course of last week's trade. In fact, dealers were holding closely to previous price views of 1½c. to 1¾c. per pound in tanks and 2c. to 2¼c. per pound in barrels.

Cutch.—Supplies were none too plentiful in any direction. The going quotation for Borneo grades was continued at 7½c. to 8½c. per pound in bales, whereas the Rangoon descriptions were being quoted at 14c. to 16c. per pound in boxes. Recently about 25,000 pounds of cutch arrived here.

Divi-Divi.—It was difficult to develop any broad interest during the course of last week's trading. Recent arrivals against contracts embraced about 125,000 pounds, but these had not affected the shipment quotations of $58 to $60 per ton. The 25 percent extract remained in steady shape at 5c. to 5½c. per pound in barrels.

Gambier.—No definite price tendency was discernible last week. The common grades were being quoted by dealers at 5¼c. to 6c. per pound in bags, the plantation grade at 7⅜c. to 7⅞c., and the Singapore cubes at 8½c. to 9c. per pound.

Myrobalans.—Only a negligible amount of business appeared to be passing last week. The J1 were being maintained in leading trade quarters at $45 per ton for shipment and the J2s at $34 to $35 per ton for shipment. Included among recent arrivals were about 3,000 from India at this city and Boston.

Nutgalls.—The condition had not changed much last week. The Chinese grades were being maintained at 13c. to 14c. per pound for shipment in cases and the Aleppo grades at 20c. to 22c. per pound in bags.

Quebracho.—A good volume of contract shipments was reported to be continuing on the basis of 5¼c. per pound for the 63 per cent extract in barrels and at 5⅝c. per pound for the 64 percent clarified. In the case of both products the import duty was for buyers' account. Recent arrivals included about 138,000 bags from the Argentine at this city and in Boston.

Sumac.—Although shipment prices for the Sicilian ground were on a basis of from $60 to $65 per ton, it was suggested in some quarters that the minimum basis at which primary market shippers were willing to listen to bids was $61. The quotation for the stainless extract remained at 10c. to 11c. per pound in barrels and did not reflect the firmer conditions in the primary market.

Valonia.—The trade had not yet started to take hold in normal volume for this season of the year. Conditions on the whole were reported as weaker, with 40 percent beards quoted at $66 per ton for shipment and mixtures at $54 to $55 per ton for shipment.

Wattle Bark.—This product declined to $54 per ton for shipment in bags. A fair trade was reported in progress, but there was room for substantial improvement.

Current Prices

(For late price changes, see page 2)

Chemicals

Aluminum chloride, 33@35 p.c., works, drums	lb.	.03 @	.03¼
Antimony salt, 66 p.c., tins	lb.	.25½@	.26
Iron nitrate, commercial (see Industrial chemicals).			
Potash bichromate, casks	lb.	.08¾@	.09
prussiate (see Industrial Chemicals).			
Soda bichromate, casks	lb.	.07 @	.07¼
hydrosulphite, barrels	lb.	.23 @	.25
hyposulphite, crystals, barrels.	100 lbs.	2.40 @	2.75
pea, barrels	100 lbs.	2.50 @	3.00
granular, barrels	100 lbs.	2.75 @	3.25
phosphate, commercial (see Industrial Chemicals).			
prussiate (see Industrial Chemicals).			
Tin crystals (see Industrial Chemicals).			
Turkey red oil, 50 p.c., barrels or drums	lb.	.09 @	.11
75 p.c., barrels or drums	lb.	.12 @	.14
Zinc dust (see Industrial Chemicals).			

Dyestuffs

Annatto paste, boxes	lb.	.34 @	.37
seed, boxes	lb.	.07¼@	.07½
Archil extract, concentrated, barrels	lb.	.17 @	.19
double, barrels	lb.	.12 @	.14
Barwood (see red sanders wood).			
Brazil-wood extract (see hypernic)			
sticks, shipment	ton.	26.00	@28.00
Camwood bark, ground, barrels.	lb.	.18 @	—
Cochineal gray, bags	lb.	.95 @	—
black	lb.	None.	
Teneriffe silver, bags	lb.	.95 @	—
Cudbear, powdered, boxes	lb.	.17 @	.23
Fustic, extract, crystals, barrels, regular	lb.	.18 @	.22
liquid, 51 deg., barrels	lb.	.08 @	.10
42 deg., barrels	lb.	.07 @	.09
solid, drums	lb.	.14 @	.16
sticks, shipment	ton.	25.00	@26.00
Hematine, crystals, barrels	lb.	.14 @	.18
Hypernic, solid, drums	lb.	.17 @	.20
liquid, 51 deg., barrels	lb.	.11 @	.15
Indigo, Madras, barrels	lb.	1.26 @	1.29
synthetic, liquid, barrels	lb.	.12 @	—
Logwood extract, crystals, barrels	lb.	.14 @	.18
liquid, 51 deg., barrels	lb.	.07 @	.08¼
solid, boxes	lb.	.12 @	.14
sticks, Haitian, shipment	ton.	24.00	@25.00
Madder, Dutch, bags	lb.	.22 @	.25
Osage orange extract, liquid, 51 deg., barrels	lb.	.06¾@	.07¼
Persian berry extract, barrels	lb.	.25	Nom.
Quercitron extract, liquid, 51 deg., barrels	lb.	.05½@	.06
solid, drums	lb.	.09½@	.10
Red sanders wood, ground, barrels	lb.	.18 @	—
Turmeric (see Botanical Drugs).			

Sizing Materials

Albumen, blood, barrels	lb.	.43 @	.48
egg, edible, cases	lb.	.80 @	.85
Dextrin, British gum, bags	100 lbs.	5.02 @	5.22
corn, bags	100 lbs.	4.77 @	4.97
potato, imported, bags	lb.	.08 @	.09
Egg yolk, granular, cases	lb.	.68 @	.70
spray, cases	lb.	.74 @	.76
Sago flour, bags	lb.	.04½@	.05⅛
Starch, corn, pearl, bags	100 lbs.	3.97 @	4.17
powdered, bags	100 lbs.	4.07 @	4.27
potato, domestic, bags	lb.	.05¾@	.06¼
imported, bags	lb.	.06 @	.06½
rice, barrels	lb.	.09 @	.10
wheat, bags	lb.	.06½@	.10½
Tapioca flour, bags	lb.	.03¼@	.05½

Tanning Materials

Chestnut extract, clarified, 25 p.c., tannin, barrels	lb.	.02 @	.02¼
tanks	lb.	.01¾@	.01¾
Cutch, Borneo, bales	lb.	.07½@	.08⅛
Rangoon, boxes	lb.	.14 @	.16
Divi-divi, shipment, bags	ton.	58.00 @	—
extract, 25 percent tannin, barrels	lb.	.05 @	.05½
Gall extract, barrels	lb.	.18 @	.20
Gambier, common, bags	lb.	.05¼@	.06
extract, 25 percent tannin, barrels	lb.	.08 @	.10
plantation, bags	lb.	.07¾@	.07⅞
Singapore, cubes, bags	lb.	.08½@	.09
Hemlock extract, 25 p.c. tannin, barrels	lb.	.03¾@	.04¼
Mangrove bark, African, shipment	ton.	37.00	@38.00
Myrobalans, J1, shipment, bags,	ton.	45.00 @	—
J 2, shipment, bags	ton.	34.00	@35.00
extract, liquid, 25 p.c., barrels,	lb.	.03¾@	.04¼
powdered, 53 p.c., barrels	lb.	.05 @	.05½
Nutgalls, Aleppo, bags	lb.	.20 @	.22
Chinese, shipment, cases	lb.	.13 @	.14
Oak bark extract, 25 p.c. tannin, barrels	lb.	.04 @	.04½
Quebracho extract, solid, 63 p.c. tannin, barrels	lb.	.05¼@	.05⅝
clarified, 64 p.c.		.05⅝@	—
liquid, 35 p.c., barrels	lb.	.03¼@	.03½
Spruce extract, 25 p.c. tannin, barrels	lb.	.01½@	.02
powdered, barrels	lb.	.02½@	.03
Sumac, domestic, f.o.b. South, bags	ton.	35.00 @	—
extract, 42 deg., barrels	lb.	.05½@	.06½
Sicilian, ground, shipments, bags	ton.	60.00	@65.00
extract, stainless, barrels	lb.	.10 @	.11
Valonia beards, 40 p.c., shipment, bags	ton.	66.00 @	—
cups, shipment, bags	ton.	No stocks	
mixtures, shipments, bags	ton.	54.00 @	—
Wattle bark, shipment, bags	ton.	55.00 @	—

Chemical Salesmen's Golf Tournament Is Sept. 18

The Chemical Industries' Open Golf Championship will be held tomorrow, September 18, at the Lenox Hills Golf Club, Farmingdale, Long Island. It is to be in every sense of the word an open championship—open for golfers who shoot 75 and for those who shoot 175. Handicaps will run from nothing to 35. The tournament, open to all those in the chemical industry who desire to play, will be run under the supervision of the Salesmen's Association of the American Chemical Industry. Robert Quinn, Mathieson Alkali Works, is chairman of the committee in charge.

Players in the tournament will be entitled to play two rounds during the day, either one of which they may turn in as their tournament score. There will be a dozen or more prizes for low scorers and high scorers. To reach the club from New York, the committee suggests the Long Island Motor Parkway to Farmingdale exit, turn right and go one mile to club house. By train, take the Long Island Railroad to Farmingdale and taxi to club house. The entry fee, which includes greens fee, is to be $3. Reservations should be made to Robert Quinn, care Mathieson Alkali Works, telephone Vanderbilt 3510.

Chemical Salesmen to Hold Annual Election October 16

The nominating committee of the Salesmen's Association of the American Chemical Industry has reported the following names for action at the annual meeting October 16:—

President—Ralph E. Dorland, Dow Chemical Company, New York.

Vice-presidents—Victor E. Williams, Monsanto Chemical Works, New York; W. O. Thompson, Grasselli Chemical Company, New York; Robert I. Wishnick, Wishnick-Tumpeer Chemical Company, New York.

Secretary-treasurer—A. L. Benkert, Noll Chemical & Color Works, Inc., New York.

Executive Committee—E. A. Orem, E. I. Du Pont de Nemours & Co., to fill unexpired two-year term of V. E. Williams; for three-year term, F. M. Fargo, Jr., Calco Chemical Company, Bound Brook, N. J.; Chas. F. Kelly, Rhodia Chemical Company, New York.

Electrochemists' Program

American Society Meets Sept. 20 At Charleston, W. Va.

The program of the fifty-fourth meeting of the American Electrochemical Society, September 20 to 22, at Charleston, West Va., follows:—

Thursday, September 20

9 a. m. Session on "Chemical Reactions at 1000° C. and Above," President Paul J. Kruesi, presiding.

"Thermoelectric Measurement of Temperatures Above 1500° C." H. L. Watson and H. Abrams, of the General Electric Company, Schenectady, N. Y.

"The High Frequency Induction Furnace for Chemical Preparations Above 1000° C." C. N. Schuette and Chas. G. Maier, of the Bureau of Mines, Berkeley, Cal.

"The Production and Use of Beryllium." Kurt Illig, of the Siemens & Halske Company, Berlin.

"The Reduction of Barium Carbonate by Aluminum." Erwin F. Lindhorst and Herman Schlundt, of the University of Missouri.

"The Vapor Pressure of Barium Oxide." M. deKay Thompson and W. G. Armstrong, of the Massachusetts Institute of Technology.

"The Equilibrium of the System: Barium Carbide, Barium Oxide, Carbon and Carbon Monoxide." M. deKay Thompson, of the Massachusetts Institute of Technology.

12 noon. Informal luncheon and round table discussion, Hotel Kanawha.

2 p. m. Visits to industrial plants. Buses leave Hotel Kanawha promptly.

5.30 p. m. Meeting of the Board of Directors, Hotel Kanawha.

6:45 p. m. Complimentary supper, main dining room, Hotel Kanawha, Tendered by Charleston Chamber of Commerce.

Friday, September 21

9 a. m. Scientific session.

"Electrochemistry of the Proteins." David M. Greenberg, of the Medical School, University of California.

"Cathodic Halogen." Robert H. Clark and R. H. Ball, of the University of British Columbia.

"Conductivity of Organic Solvents." D. B. Keys, Sherlock Swann, Jr., and H. W. Hoerr, of the University of Illinois.

"A Voltaic Hydrogen Generator." W. Cecil Gardiner and Geo. A. Hulett, of Princeton University.

"The Effect of Absorbed Gas on the Contact Resistance of Carbon." Robert H. Wright and Melville J. Marshall, of the University of British Columbia.

"The Nature of Gas-Metal Electrodes." Sidney J. French and Louis Kahlenberg, of the University of Wisconsin.

"The Use of Misch Metal as an Electrolytic Rectifier." H. C. Kremers and D. C. Thomas, of the University of Illinois.

"Maintenance of the Volt." Geo. W. Vinal, of the Bureau of Standards, Washington, D. C.

"Corrosion in the Tin Can." Roger H. Lueck and Harold T. Blair, of the American Can Co., San Francisco.

12 noon. Informal luncheon, Hotel Kanawha.

1.15 p. m. Busses leave Hotel Kanawha for railroad station. Trip to Huntington and visit to plant of the International Nickel Company; smelting, rolling and plating operations.

5.15 p. m. Leave Huntington for Charleston.

6.30 p. m. Informal dinner (Dutch treat), Hotel Kanawha.

7.30 p. m. Buses leave Hotel Kanawha for Edgewood Country Club.

8 p. m. "Old Fashioned Southern Meeting," Edgewood Country Club; complimentary entertainment and refreshments.

Saturday, September 22

9 a. m. Technical session on Electrodeposition, Dr. Duncan MacRae, presiding.

"Electrodeposition of Tellurium." F. C. Mathers and H. L. Turner, of the University of Indiana.

"Polarization and Resistivity in Nickel Plating Solutions." Roy L. Dorrance and W. C. Gardiner, of Queen's University.

"The Co-Deposition of Copper and Graphite." Colin G. Fink and James D. Prince, of Columbia University.

"Duriron as an Isoluble Anode for Gold Cyanide Solutions." M. deKay Thompson, of the Massachusetts Institute of Technology.

"Steel Anodes for Chromium Plating." E. M. Baker and E. E. Pettibone, of the University of Michigan.

"Porosity of Electrodeposited Chromium." E. M. Baker and A. M. Rente, of the University of Michigan.

"Electrometric Determination of Peroxide of Hydrogen and the Associated Peracids." A. Rius, of the Industrial School of Zaragossa, Spain.

"Electrometric Titration of Hypochlorite and Hypochlorite-Carbonate Mixtures." A. Rius and V. Arnal, of Zaragossa, Spain.

"Simple Metallic Electrodes in the Potentiometric Titration of Acids and Bases." John O. Closs and Louis Kahlenberg, of the University of Wisconsin.

"Electrodeposition of Copper-Nickel Alloys." C. J. Welz, Cornell University.

"Nickel Mirrors by the Nickey Carbonyl Method." Colin G. Fink and Walter G. King, Jr., of Columbia University.

1 p. m. Adjournment.

Entertainment for Ladies

The ladies will be entertained by the local ladies at tea, bridge, luncheon and sight-seeing trips.

Thursday, 6.45 p. m. Informal supper and smoker, main dining room, Hotel Kanawha.

Friday, 1.15 p. m. Leave Hotel Kanawha for railroad station, trip to Huntington.

Friday, 8 p. m. Complimentary entertainment at the Edgewood Country Club; music, dancing and refreshments.

Zink Elected Director Of Eli Lilly & Co.

At a meeting of the board of directors of Eli Lilly & Co., held at Indianapolis, September 10, the vacancy on the board created by the death of James E. Lilly was filled by the election of Edward Zink, manager of the eastern division of the company, with headquarters at 81 Spring street, New York.

Mr. Zink joined the manufacturing staff of the Lilly laboratories after leaving DePauw University, Greencastle, Ind., in 1897. After twelve years in the laboratories, followed by road experience Mr. Zink was made a division manager in Kansas City, then assistant to the manager of sales and traveling service at Indianapolis, and finally manager of the entire eastern division.

Under his leadership the eastern business of the company has shown great progress. The eastern division of the company embraces the territory from Canada to Florida, and as far west as Buffalo.

DRY COLORS—DYESTUFFS
IMPORT EXPORT
FEZANDIÉ & SPERRLE, 205 Fulton Street, New York
Telephone: Cortlandt 1460-1461 Cable Address: "Fezan," N. Y.

L. E. RANSOM CO.
Importers
279 Pearl Street
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ON SPOT AND TO ARRIVE

JOHN SHAW & CO., 15 ELKINS STREET SO. BOSTON, MASS.
ALIZARINE ASSISTANT
TURKEY RED OIL
SULPHONATED RED OIL
SULPHONOLE
A new sulphonated oil with powerful emulsive qualities. One part of SULPHONOLE added to four or more parts of mineral oil gives a clear oil that will make a perfect emulsion in water.

Where You Can Sell

Complete and Convenient Reference Guide for Sales Executives and Advertisers to Manufacturing Consumers of Chemicals, Oils and Related Products

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Ninetieth Recapitulative Instalment

(Parenthetical references are to the numbers of patents in the United States or other countries, as designated)

Aluminum Gammaethyl-acetylacetone

(Aluminiumgammaæthylacetylaceton, Gammæthyleacetyleacetone d'Aluminium)

Chemical

Starting point (B289493) in making—
- Intermediate chemicals
- Synthetic perfumes
- Synthetic pharmaceuticals

Dye

Starting point (B289493) in making various synthetic colors

Petroleum

Ingredient (B289493) of—
- Motor fuels, acting as an antidetonant

Aluminum Propionyl-acetone

(Aluminiumpropionylaceton, Propionyleacetone d'Aluminium)

Chemical

Starting point (B289493) in making—
- Intermediate chemicals
- Synthetic perfumes
- Synthetic pharmaceuticals

Dye

Starting point (B289493) in making various synthetic colors

Petroleum

Ingredient (B289493) of—
- Motor fuels, acting as an antidetonant

4-Benzoyl-1:8-naphthalic Acid

(Acide de 4-Benzoyle-1:8-naphthalique, 4-Benzoyl-1:8-naphtalsaeure)

Chemical

Starting point (B288985) in making benzanthrone derivatives, such as—
- Benzanthronepericarboxylic acid
- 4-Benzoyl-1:8-naphthalic-N-phenylimide
- 4-Benzoyl-1:8-naphthoylenebenzimidazole
- 4-Benzoyl-1:8-naphthoylene-1:2-naphthyleneimidazole
- Chlorobenzanthronepericarboxylic acid

4-Benzoyl-1:8-naphthalic Anhydride

(Anhydride de 4-Benzoyle-1:8-naphthalique, 4-Benzoyl-1:8-naphtalanhydrid, 4-Benzoyl-1:8-naphtalsaeuresanhydrid)

Chemical

Starting point (B288985) in making benzanthrone derivatives, such as—
- Benzanthronepericarboxylic acid
- 4-Benzoyl-1:8-naphthalic-N-phenylimide
- 4-Benzoyl-1:8-naphthoylenebenzimidazole
- 4-Bonzoyl-1:8-naphthoylene-1:2-naphthyleneimidazole
- Chlorobenzanthronepericarboxylic acid

Blue Camphor Oil

(Blauescamphoroel, Blaueskampferoel, Huile de Camphre Bleue)

Chemical

Starting point in making—
- Safrol

Fuel

Illuminant

Insecticide

Ingredient of insecticidal preparations (B278816)

Fats and Oils

Starting point in making—
- Essence of clove

Ceramics

Binding agent in printing designs on—
- Chinaware
- Porcelains
- Potteries

Paint and Varnish

Ingredient of—
- Paints
- Varnishes

Printing

Reagent in—
- Lithography

Resins and Waxes

Ingredient of—
- Phenol condensation products, added to increase the elasticity

Borneol Butyrate

(Bornyl Butyrate, Buttersaeureborneolester, Buttersaeurebornylester, Buttersaeuresborneol, Buttersaeuresbornyl, Butyrate de Borneole, Butyrate de Bornyle, Butyrate Bornylique)

Paint and Varnish

Plasticizer and solvent (B283619) in making—
- Cellulose ester or ether lacquers, varnishes, and dopes

Plastics

Plasticizer and solvent (B283619) in making—
- Cellulose ester or ether compositions

Perfumery

Ingredient of—
- Synthetic perfume preparations

Ethyleneglycolmonomethylether Phthalate

(Æthylenglykolmonomethyläther-phtalat, Phtalate d'Ethyleneglycolmonomethyle-ether)

Paint and Varnish

Plasticizer and solvent (B278735) in making—
- Cellulose acetate varnishes, dopes, and lacquers

Plastics

Plasticizer and solvent (B278735) in making—
- Cellulose acetate products

Isoamyldihydrocuprein Ether

(Ether d'Isoamyledihydrocupreine, Ether Isoamyledihydrocuprein ique, Isoamyldihydrocupreinæther)

Chemical

Starting point (B282356) in making antiparasitic agents with—

Apocholic acid	Potassium glycocholate
Cholic acid	Potassium taurocholate
Dehydrocholic acid	Sodium apocholate
Desoxycholic acid	Sodium cholate
Glycocholic acid	Sodium dehydrocholate
Potassium apocholate	Sodium desoxycholate
Potassium cholate	Sodium glycocholate
Potassium dehydrocholate	Sodium taurocholate
Potassium desoxycholate	Taurocholic acid

Isoborneol Formate

(Ameisensaeureisoborneolester, Ameisensaeureisobornylester, Ameisensaeuresisoborneol, Ameisensaeuresisobornyl, Formiate d'isoborneole, Formiate d'Isobornyle, Formiate Isobornylique, Isobornyl Formate, Isobornylformiat)

Paint and Varnish

Plasticizer and solvent (B283619) in making—
- Cellulose ester or ether varnishes, lacquers, and dopes

Plastics

Plasticizer and solvent (B283619) in making—
- Cellulose ester or ether compositions

5-Methyl-2:4-dichlorophenyl-1-thioglycollic Acid

(Acide de 5-Methyle-2:4-dichlorophenyle-1-thioglycollique, 5-Methyl-2:4-dichlorophenyl-1-thioglykolsaeure)

Dye

Starting point (B271906) in making—
- Thioindigoid dyestuffs

Naphthylthioglycollic Acid

(Acide de Naphthylesulfoglycollique, Acide de Naphthylethioglycollique, Naphthylsulphoglycollic Acid, Naphtylsulfoglykolsaeure, Naphtylthioglykolsaeure)

Dye

Starting point (B284288) in making thioindigoid dyestuffs with—

Acenaphthenequinone	Isatin
Alphaisatinanilide	Isatin homologs and substitution products
5:7-Dibromoisatin	Orthodiketones

4-Nitrotoluene-2-sulphonic Acid

(Acide de 4-Nitrotoluene-2-sulfonique, 4-Nitrotoluol-2-sulfonsaeure)

Chemical

Starting point (B288972) in making—
- N-Diethylaminoethylmetachloropara-aminobenzaldehyde
- N-Diethylaminoethylorthomethoxypara-aminobenzaldehyde
- N-Diethylaminoethylpara-aminobenzaldehyde
- N-Methyldiethylaminoethylpara-aminobenzaldehyde

Picramic Acid

(Acide Picraminique, Acide de Picramique, Dinitroaminophenol, Picraminic Acid, Pikramininsaeure, Pikraminsaeure)

Chemical

Starting point in making—
- Intermediates and other compounds (salts and esters)

Dye

Starting point in making—
- Anthracene acid brown R
- Anthracyl chrome brown D (used as an oxidizing agent)
- Anthracyl chrome green D
- Azo dyestuffs
- Chrome brown P
- Chrome patent green N
- Metachrome brown A
- Metachrome bordeaux R
- Metachrome brown B
- Triazo colors

Explosives

Explosive for general purposes, alone or in compositions

Military

As an explosive

Potassium Phosphotungstomolybdate

(Kaliummolybdænwolframphosphat, Kaliummolybdænphosphorwolframat, Kaliumwolframphosphormolybdat, Molybdænphosphorwolframsaeureskalium, Molybdænphosphorwolframsaeurespotassche, Molybdænwolframphosphorsaeureskalium, Molybdophosphoretungstate de Potasse, Molybdophosphoretungstate Potassique, Molybdophosphoretungstate de Potassium, Molybdotungstophosphate de Potasse, Molybdotungstophosphate Potassique, Phosphoremolybdotungstate de Potasse, Phosphoretungstomolybdate de Potasse, Phosphorwolframmolybdænsaeureskalium, Potassium Phosphomolybdotungstate, Potassium Tungstomolybdophosphate, Potassium Tungstophosphomolybdate)

Dye

Ingredient (B275943) of color lakes containing—
- Para-aminobenzaldehyde
- 4:4'-Tetramethyldiaminobenzhydrol
- 4:4'-Tetramethyldiaminobenzophenone
- 4:4'-Tetramethyldiaminodiphenylmethane

Paint and Varnish

Ingredient (B275969) of—
- Cellulose ester or ether lacquers containing basic colors.

Phenyl Thiosalicylate

(Phenyl Sulphosalicylate, Phenylsulfosalicylat, Phenylthiosalicylat, Sulfosalicylate de Phenyle, Sulfosalicylate Phenylique, Sulfosalicylsaeurephenylester, Sulfosalicylsaeuresphenyl, Thiosalicylate de Phenyle, Thiosalicylate Phenylique, Thiosalicylsaeurephenylester, Thiosalicylsaeuresphenyl)

Chemical

Starting point (B282427) in making synthetic drugs with—
- Salts of gold, silver, arsenic, bismuth, and antimony

Pharmaceutical

In compounding and dispensing practice

Sharples Wax

Chemical

Starting point (B287514) in making—
- Aldehydes, alcohols, and ketones by oxidation
- Carboxylic acids

Construction

Ingredient (B287514) of—
- Waterproofing compositions used in the treatment of brick, stone, and concrete

Miscellaneous

Ingredient (B287514) of—
- Waterproofing compositions for treating asbestos, strawboard, and other materials

Paper

Ingredient (B287514) of—
- Sizing emulsions

Textile

Finishing

Ingredient (B287514) of—
- Dressings
- Waterproofing compositions

Tiny "Niagaras" of Lilly Capsules Pass Minute Inspection

Each tiny, sparkling, empty gelatin capsule made in the Lilly Laboratories is individually inspected. Millions of them are made yearly, yet each one has passed the close scrutiny of keen and watchful eyes trained to note quickly the slightest imperfection in the steady stream that is carried along on a narrow belt before the inspector's eyes.

Lilly Capsules are made under the "rigid rules for quality" that obtain everywhere in the Lilly Laboratories. The crude material must be the very best. The pure air in the Lilly Capsule Plant is literally "washed." No hands touch the capsule on its journey of evolution from the crude gelatin to the finished product. Lilly Capsules have the approval not only of the most particular pharmacists but they also carry the unqualified indorsement of users whose orders run into millions yearly.

Users of capsules will be interested in samples and quotations on capsules of Lilly Quality.

ELI LILLY AND COMPANY

INDIANAPOLIS, U. S. A.

Favourable Climatic Conditions.

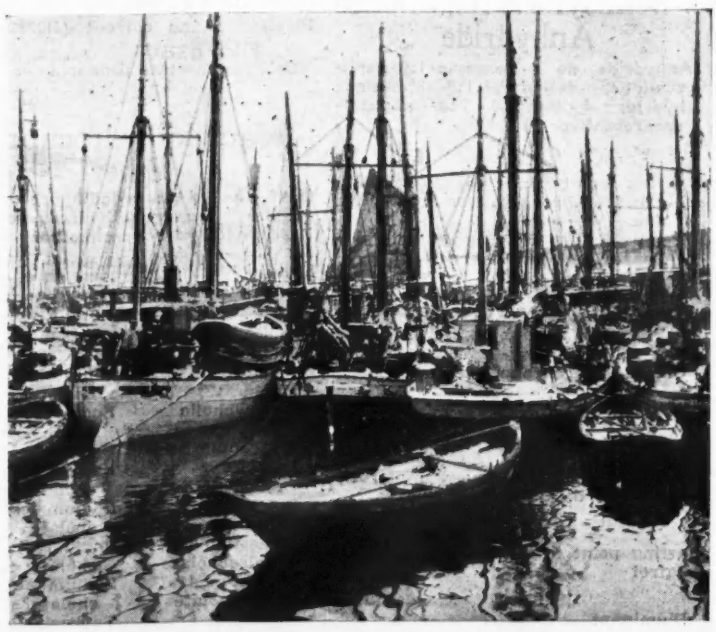
By far the greater part of the cod, the liver of which is used for the production of Norwegian codliver oil is caught in the winter and early spring, when the temperature of the air is low, i. e. from about 19° to about 39° F.

This, in conjunction with the fact that the distance from the fishing grounds to the refineries is never long, ensures perfect freshness. Norwegian medicinal codliver oil is unexcelled in vitamincontent, and is practically tasteless and odourless.

NORWEGIAN MEDICINAL CODLIVER OIL

Anti-rachitic Growth-promoting

Photo Wilse *Fabritius, Oslo*



Drugs and Fine Chemicals

Quicksilver Rise on Spot Extended on Dearth of Foreign Offerings—Cream of Tartar Up—Cadmium Stronger

Undertones of very steady character prevailed last week in the market for drugs and fine chemicals. Business showed a moderate pick-up coincident with the resumption of operations following the end of the summer holiday period. Orders were more numerous in most quarters and some found a gain in the unit quantities taken on individual purchases. Stability of values was a feature at all time, changes being very few in number.

Quicksilver was a very strong article at all times. Prices were raised here in conformity with the absence of firsthand offerings in Europe and the higher prices asked by secondhands in London and on the Continent. The importers here awaited with a deal of impatience the announcement of selling prices by the new international selling agency formed through the offices of the Spanish and Italian Governments.

All tartar products were stronger. Due to advances in the price for crude tartar, makers of cream of tartar announced a higher schedule earlier in the week. Although no change in quotations for imported goods was announced, it was intimated that a rise was likely; at least the market was much firmer. Tartar emetic remained firm at the recent advance and an upward tendency in prices for Seidlitz mixture and Rochelle salt was noted.

Improvement in the recently much depressed market for glycerin came as a welcome development to those in that trade. More activity was reported. A better feeling was manifested generally, and although prices generally were not advanced, greater stability and a tendency toward improvement was noted. Sales of dynamite were made at higher rates.

Menthol underwent no change. Open market prices contrasted with those at which actual consumers could purchase through a large consumer interested in keeping the Japanese market from advancing. Demand was moderate. Mercurials were generally very firm, due to the position of metal. Demand was good and the tendency seemed to be upward. Reports from London made the entire group higher.

Bismuth and cadmium metal were available at unchanged prices but the latter was stronger. Production of cadmium was reported being absorbed promptly and accumulation of a surplus anywhere in the world seemed to be an impossibility at this time due to the constant drain on supplies by manufacturers generally.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced
Cream of tartar, domestic, 1c. per lb.	Silver bullion, N. Y., ¼c. per oz.
Glycerin, dynamite, ¼c. per lb.	London, ⅛ pence
Quicksilver, $2 per flask	
Tartar emetic, 2c. per lb.	

Comparative Values

Index numbers compiled from thirty-five typical drugs and fine chemicals on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
183.2	183.1	183.1	173.5

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Acetaldehyde.—The producer has kept this article well maintained since the recent change in prices. Demand was reported steady but hardly expansive.

Acetanilide.—Makers were firm in their views, not being inclined to shade prices even considering the moderate amount of secondhand competition current in the market from time to time.

Acetone.—The producers indicated no change in prices as pending despite the lower prices being paid for corn and the prospect of a large crop. Demand was seasonably active.

Acetylsalicylic Acid.—Business was fair but in the main it consisted of routine requirements of smaller buyers. Prices were very steady. Resale offerings were moderate in size and the price cut under the producers considerably.

Albumen.—Prices were firm. Producers of milk albumen reported a sufficient movement into consumption to eliminate all chance of an accumulated surplus. Vegetable albumen was somewhat competitive but in the main it was without effect on present prices.

Alcohol.—Removal of all restrictions on the production of sugar in Cuba this year was of interest to the alcohol producers from the standpoint of its possible effect on the production of molasses and the price therefor. Alcohol business was fairly active last week, the movement against contracts being excellent and the production for the balance of this year being fairly well sold up. Prices were firm.

Aloin.—Firm prices reflected the strength of raw material as well as the presence of a very steady movement of production into consuming channels. Competition was relatively light most of the time.

Current prices on drugs and fine chemicals, formerly printed on pages 4 and 6, are now printed at the end of this market report.

Ammonia Salicylate.—In company with all salicylates, this article was firm and subject to a very steady demand at full prices. Competition was normal in extent and effect.

Antipyrin.—Prices were firm. Exhaustion of low priced stocks worked to the improvement of the local price position and steady demand last week emphasized the situation.

Barbital.—The price for imported merchandise was very steady and was readily maintained mainly because of the lack of competition from the domestic made article. The price abroad is quite low at the moment but the duty here is high.

Bay Rum.—Business was slower. Inquiries were fewer and the orders out of spot stocks were not so numerous. Prices remained firm for the imported merchandise, import costs remaining well maintained.

Bismuth.—Little was said regarding the foreign situation in metal but apparently prices were at least steady. Demand for salts on spot was normal and a satisfactory volume of new orders was booked during the period.

Cadmium Metal.—Reports from London made the market 3d. per pound on that spot and 2s. 6d. for goods to arrive. The New York market was strong, demand taking production promptly and eliminating stock accumulation.

Cantharides.—Stabilized prices at fairly attractive levels was the rule last week. Demand was irregular and lacked indications of an early improvement.

Castor Oil.—Some believed the decline had brought the market close to bottom. Reduced prices for raw material had eased the market but it was not believed that reductions would be extended very far. Prices were steadier under improved demand here for oil.

CHICAGO, Sept. 12.—While the market for castor oil developed no change in prices, and while the market was generally devoid of feature, the buying has been good, mostly as a result of activity of small consumers. A fair inquiry also developed from car lot takers. Warehouse buying comprised the bulk of the business. Sellers were satisfied to take business without trying to advance prices. Ruling quotations, per pound, were:—No. 1, drums, car lots, 13c.; drums, less than car lots, 13½c.; barrels, car lots, 13¼c.; barrels, less than car lots, 13¾c.; 5-gallon tins, 14¾c.; one-gallon tins, 16¾c.; No. 3, drums, car lots, 12½c.; drums, less than car lots, 13c.; barrels, car lots, 12¾c.; barrels, less than car lots, 13¼c.

Cocoa Butter.—Weakness in the cocoa bean market was marked, prices tending downward under plentiful offerings. This continued to keep the butter market favorable to acceptance of bids.

Citrates.—Reports from London mentioned higher prices for citrates in that market. Local producers have yet to make any change in their schedule.

Codliver Oil.—Spot prices were steady though demand still lagged. Norway is understood to have a new

Valuable information on Imports and Exports of Drugs and Fine Chemicals is given in port lists beginning on page 5.

BISMUTH SUBNITRATE
MERCK

Unusually bulky—a pound is much more than a pint. Excellent in suspensions. White. Odorless. Purity the highest.

MERCK & CO. INC.
MANUFACTURING CHEMISTS
SUCCESSORS TO
POWERS-WEIGHTMAN-ROSENGARTEN CO.
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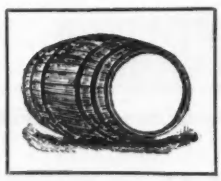

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law providing for the control of the quality of all medicinal oils made in that country. Exportation will be contingent on the granting of a certificate of quality which will be official and accompany the merchandise.

Corn Syrup. — Easy undertones and the prospect for an early increase in production at lower cost featured the spot market last week. Demand was about normal.

Cream of Tartar.—Makers advanced prices 1c., naming barrels at 27¼c. per pound; kegs, 28½c.; fiber drums, 29c. Advances in the price for raw material forced the movement. Quotations for imported were unchanged but were firmer.

Dover's Powder. — Ipecac remained firm at the point recently reached on the rise in prices. The market was subject to good request at firm prices, though for Dover's powder they were without change.

Ergotin.—Sales were slow. The falling market in ergot tended to reduce the call for all ergot products. The tendency of prices was downward.

Eucalyptol.—The raw material was very firm, giving the derived product a well maintained position in the spot market. Demand was moderate in volume and thoroughly routine.

Formaldehyde. — Exports during the first seven months of this year totaled 1,527,565 pounds, as compared with 1,223,694 pounds last year for the equivalent period. Prices on spot were unchanged in a very firm market.

Glycerin.—Better business, improved undertones, and a generally more steady market was the rule locally last week. Considerable trading in dynamite was done by the powder manufacturers and prices paid were ¼c. higher at 12½c. per pound. The range was to 12¾c. An increase in the smaller requests for chemically pure was also reported and considerably less shading of prices was the rule. Crude was steadier in the main and the future seemed to be more promising. Imports of glycerin during the period, January-July, with those for 1927 in comparison were as follows:—

	Pounds	
	1928.	1927.
Crude	1,430,591	8,197,120
Refined	925,837	4,771,109
Totals	2,356,428	12,968,229

CHICAGO, Sept. 12.—Glycerin tended somewhat firmer, as buyers came into the market on a fair scale. Prices were unchanged. Some purchasers were beginning to take their requirements for the next few months into account and were inquiring briskly. Most of the buying was of the small-lot variety. Ruling quotations per pound were:—Dynamite, 12½c. to 13c.; soaplye, crude, 80 percent basis, 7½c.; chemically pure, car lots, returnable drums, 14c. to 14½c.; chemically pure, less than car lots, returnable drums, 15c.; saponification, 88 percent basis, 8½c. to 8¾c.

Hexamethylenetetramine.—The firm position of raw material gave much support to prices for this commodity. Also, the market was subject to an exceptionally steady request.

Iodides.—Potash iodide was strong, makers taking most of the orders prevalent locally. Resale merchandise was not offered at all in volume but the price for small lots obtainable was about 10c. under the price of the domestic makers. The balance of the iodide group was in firm position.

Menthol.—Little change came in the situation locally. Buyers for consumption could purchase in small lots for $5 per pound but others were compelled to pay $5.25. The cheaper merchandise came from a large manufacturing consumer who continued to act in an effort to stop permanently the rising market that a few weeks back featured the Japanese and spot markets.

Mercurials.—Reports from London made the market higher there but despite the unquestionably strong position of raw material, domestic producers have yet to change their open schedules.

Methanol. — Exports during first seven months of this year totaled 396,814 gallons as compared with 125,974 gallons moved out of the country during the equivalent period, 1927. The market showed but little change locally, remaining firm to strong at recently prevailing prices but with sufficient material being available to meet any normal consumption demand during the next few months to come.

Methyl Acetone.—A firm market ruled with stocks of moderate size being well maintained as to price. Demand was also fair, tending to eliminate possible development of weakness.

Podophyllin. — The market was steady. Cost of raw material has become less subject to fluctuation at the moment. However, the outlook favored a good sized crop. Podophyllin was in moderate demand most of the week.

Quicksilver.—Market was strong as to price but a rather inactive one as to demand. Prices were $2 higher at $130 to $132 per flask. The foreign markets offered virtually nothing so far as firsthand shippers were concerned. Resellers in London were in the market with some lots of limited size at higher prices but the tendency all along the line was to await further developments in the working out of the agreement between the Spanish and Italian factors.

Quinine.—The next move in the quinine case between the U. S. Government and the Dutch makers will be the signing of the consent decree by the latter. They have accepted the decree and the signing will be done in this country, where the decree will become a matter of court record and subject to court orders and procedure at any time in the future when cause for action might develop.

Silver Nitrate. — The schedule of prices since the last report prevailed at the following levels, covering quantities of 100 ounces; small lots cost from 1c. to 2c. more, and quantities of 500 ounces about 1c. less; comparison of New York and London prices for bullion is also provided:—

	Per ounce		
		Bullion	
	Nitrate Cents.	New York Cents.	London Pence.
Saturday	40⅝	57⅝	26⅞
Monday	40⅝	57⅞	26⅛
Tuesday	40⅝	57¾	26⅞
Wednesday	40⅝	57⅝	26½
Thursday	40⅝	57¾	26½
Friday	40⅝	57½	26⅛

Current Prices

(For late price changes, see page 2)

Acetaldehyde, drums	lb.	.18½@	.21
Acetanilide, U.S.P., barrels	lb.	.36 @	.37
Acetone, car lots, drums	lb.	.15 @	—
less car lots, drums	lb.	.16 @	.17
methyl (see methyl acetone).			
Acetone oil, barrels	gal.	1.15 @	1.25
Acetphenetidin, barrels	lb.	1.40 @	1.50
Acetylsalicylic acid, barrels	lb.	.85 @	.90
Aconitine alkaloid, amorphous, vials	oz.	20.00 @	—
crystals, vials	oz.	30.00 @	—
Adeps lanae, anhydrous, barrels,	lb.	.14 @	.16
hydrous, barrels	lb.	.13½@	.15
Agar agar, No. 1, bales	lb.	1.25 @	1.26
No. 2, bales	lb.	1.05	Nom.
No. 3, bales	lb.	.85 @	.87
Albumen, milk, f.o.b. works, sacks	lb.	.05 @	.05½
vegetable, edible, works, barrels	lb.	.65 @	.70
Alcohol, benzyl, bottles	lb.	1.25 @	1.35
denatured, completely, No. 1, 188 proof, works, car lots, barrels	gal.	.55 @	—
drums	gal.	.48 @	—
less car lots, barrels	gal.	.58 @	.63
drums	gal.	.51 @	.56
tanks	gal.	.46 @	—
completely, No. 5, 188 proof, works, car lots, barrels,	gal.	.54 @	—
drums	gal.	.47 @	—
less car lots, barrels	gal.	.57 @	.62
drums	gal.	.50 @	.55
tanks	gal.	.45 @	—
(180 proof, C.D., 1c. per gal. less than 188 proof).			
special No. 1, 190 proof, works, car lots, barrels,	gal.	.54 @	—
drums	gal.	.47 @	—
less car lots, barrels	gal.	.57 @	.62
drums	gal.	.49 @	.54
tanks	gal.	.44 @	—
Delivered prices in drums exceed works prices, according to freight distances, as follows:—			
Zone 1	1c. per gal.		
Zone 2	2c. per gal.		
Zone 3	3c. per gal.		
Zone 4	4c. per gal.		
ethyl, 190 proof (from molasses), barrels	gal.	2.69½@	2.79½
190 proof (from grain), barrels	gal.	2.72 @	2.77
absolute, drums	gal.	4.70 @	4.80
isopropyl, 91 p.c., drums	gal.	1.05 @	1.35
98 p.c., drums	gal.	1.30 @	1.60
methyl (see methanol).			
Aldehol, denaturing grade, works, drums or tanks	gal.	.85 @	.92
Aldol, technical, car lots, drums,		.27 @	—
less car lots, drums	lb.	.31 @	—
Aloin, barrels, cans	lb.	1.15 @	1.20
Ambergris, gray, tins	oz.	36.00 @	40.00
Amidopyrene, cans	lb.	4.30 @	4.60
Ammonia acetate, kegs	lb.	.34 @	.36
borate, bottles	lb.	.35 @	—
carbonate, U.S.P., lump, barrels	lb.	.12 @	.16
powder, barrels	lb.	.13 @	.17
chloride, U.S.P., granular, barrels	lb.	.13 @	.14
phosphate, dibasic, barrels	lb.	.40 @	.43
monobasic, barrels	lb.	.40 @	.42
salicylate, U.S.P., kegs	lb.	1.15 @	1.20
Amyl acetate, technical, works, tanks	gal.	1.65 @	—
car lots, drums, works	gal.	1.67 @	—
less car lots, drums, works,	gal.	1.75 @	2.25
high test, drums	gal.	1.90 @	—
Antipyrin, bulk, cans	lb.	1.48 @	1.60
Apomorphine, cans	oz.	22.00 @	22.70
Arecoline hydrobromide, bottles, vials	oz.	7.75 @	8.75
resale, bottles, vials	oz.	6.25 @	6.50
Aristol (see Iodides, thymol).			
Aspirin (see acetylsalicylic acid).			
Atropine alkaloid, vials	oz.	6.50 @	7.00
sulphate, vials	oz.	2.65 @	3.00
Barbital, cases	lb.	3.65 @	3.90
Barium chlorate, kegs	lb.	.14 @	.15
chloride, C.P., barrels	lb.	.17 @	.18
nitrate, casks	lb.	.08¼@	.08½
sulphate, X-ray, barrels	lb.	.14 @	.15
Bay rum, domestic, barrels	gal.	.70 @	.75
imported, barrels	gal.	.85 @	.90
Betanaphthol benzoate, boxes, kegs	lb.	2.35 @	2.50
Bismuth citrate, U.S.P., VIII, boxes	lb.	2.75 @	2.80
glycerite, N.F., demijohns	lb.	.71 @	.76
hydroxide, boxes, fiber drums,	lb.	3.05 @	3.10
metal, ton lots	lb.	1.70 @	—
nitrate crystals, jars	lb.	1.85 @	1.90
oxide, powder, boxes, fiber, drums	lb.	3.45 @	3.50
Bismuth oxychloride, boxes, fiber drums	lb.	3.10 @	3.15
subbenzoate, boxes, fiber drums	lb.	3.25 @	3.30
subcarbonate, U.S.P., barrels, fiber drums	lb.	2.45 @	2.50
X-ray, bottles, fiber drums	lb.	3.40 @	3.45
subgallate, barrels, fiber drums	lb.	2.50 @	2.55
subiodide, bottles, fiber drums	lb.	4.25 @	4.30
subnitrate, cones, bottles, fiber drums	lb.	3.20 @	3.25
powder, bottles, fiber drums	lb.	2.05 @	2.10
subsalicylate, 62@66 p.c., barrels	lb.	2.90 @	2.95
Bismuth-ammonium citrate, U.S.P., scales, cans	lb.	5.50 @	5.55
Borax, crystals, car lots, freight allowed, barrels	lb.	.03 @	—
kegs	lb.	.03½@	—
sacks	lb.	.02¾@	—
granular and powder, car lots, freight allowed, barrels	lb.	.02¾@	—
kegs	lb.	.03¼@	—
sacks	lb.	.02½@	—
Bromides—			
ammonium, granular, barrels	lb.	.47 @	.48
cadmium, jars, bottles	lb.	1.20 @	1.25
calcium, jars	lb.	.65 @	.69
ethyl, pure, bottles	lb.	.85 @	.95
lithium, jars	lb.	1.85 @	1.90
potassium, domestic, barrels	lb.	.42 @	.43
sodium, domestic, barrels	lb.	.42 @	.43
strontium, barrels	lb.	.51 @	.52
Bromine, purified, cases	lb.	.45 @	.47
Bromoform, U.S.P., jars	lb.	1.80 @	1.90
Brucine alkaloid, cans	oz.	.54 @	.05½
sulphate, cans	oz.	.04 @	.05½
Butyric ether, cans	lb.	1.10 @	1.20
Cadmium metal, cases	lb.	.70 @	.75
Caffeine alkaloid, cans, cases	lb.	2.80 @	2.95
citrated, cans	lb.	2.00 @	2.40
hydrobromide, jars, bottles	lb.	4.80 @	5.00
Calcium lactate, U.S.P., barrels,	lb.	.52 @	.54
sulphide, crude, drums	lb.	.21½@	.24
Camphor, see Gums.			
Camphor, monobromate, boxes, kegs	lb.	1.85 @	1.95
Cantharides, Chinese, cases	lb.	.50 @	.55
powdered, boxes	lb.	.80 @	.82
Russian, cases	lb.	.60 @	.65
powdered, boxes	lb.	.80 @	.82
Castile soap, white, per case		15.00 @	—
Castor oil, medicinal, car lots, barrels	lb.	.12¾@	—
cases	lb.	.13¾@	—
drums	lb.	.12½@	—
less car lots, barrels	lb.	.13 @	—
cases	lb.	.14 @	—
drums	lb.	.12¾@	—
No. 3, car lots, barrels	lb.	.12¼@	—
cases	lb.	.13¼@	—
drums	lb.	.12 @	—
less car lots, barrels	lb.	.12½@	—
cases	lb.	.13½@	—
drums	lb.	.12¼@	—
Castoreum, cans, car lots	lb.	10.00	@12.00
Chalk, precipitated, car lots, extra light, casks	lb.	.03½@	.04¼
heavy, casks	lb.	.02 @	.03½
light, casks	lb.	.03¼@	.03¾
Charcoal, willow, powder (see Dry Colors, page 3).			
Chloral hydrate, drums	lb.	.75 @	.80
Chloroform, technical, drums	lb.	.18 @	.20
U.S.P., drums	lb.	.28 @	.30
resale, drums	lb.	.27 @	.28
Chloramine, U.S.P., barrels	lb.	1.50 @	2.50
Chromium sulphate, scales, boxes, cans, fiber drums	lb.	.59 @	.60
sulphate, pearls, boxes, cans, fiber drums	lb.	.46 @	.51
powder, boxes, cans, fiber drums	lb.	.51 @	.56
Chrysarobin, cans	lb.	3.65 @	3.75
Cinchonidine alkaloid, cans	oz.	.60 @	.65
sulphate, cans	oz.	.35 @	—
Cinchonine, alkaloid, cans	oz.	.38 @	.43
sulphate, cans	oz.	.25 @	—
Citric acid (see Industrial Chemicals).			
Citrates—			
ammonium, kegs	lb.	.85 @	.90
iron, U.S.P. VIII, cans	lb.	.94 @	.99
iron-ammonium, brown scales, cans	lb.	.69 @	—
green scales, cans	lb.	.65 @	.67
potash, barrels	lb.	.51 @	.53
soda, U.S.P. VIII, cans	lb.	.38 @	.40
U.S.P., X, cans	lb.	.45 @	.47
Cocaine hydrochloride, cans	oz.	8.50 @	8.75
Cocoa butter, bulk, bags	lb.	.29½@	.30
fingers, cases	lb.	.40 @	.45
Codeine alkaloid, cans	oz.	10.20	@10.25
hydrochloride, cans	oz.	9.20 @	9.25
nitrate, cans	oz.	9.20 @	9.25
phosphate, cans	oz.	7.75 @	7.80
salicylate, cans	oz.	7.75 @	7.80
sulphate, cans	oz.	8.25 @	8.30
Codliver oil, Norwegian, bbls.	bbl.	42.00	@44.00
Colchicine alkaloid, vials	oz.	20.00 @	—
Collodion, U.S.P., drums	lb.	.22 @	.23
flexible, U.S.P., drums	lb.	.24 @	.25
Corn syrup, 42 deg., barrels	100 lbs.	4.11 @	4.36
43 deg., barrels	100 lbs.	4.16 @	4.31
Coumarin, cans	lb.	3.60 @	4.00
resale, cans	lb.	3.50 @	3.55
Cream tartar, domestic, barrels,	lb.	.27¾@	.28
fiber, drums	lb.	.29 @	—
kegs	lb.	.28½@	—
imported, barrels	lb.	.26 @	.26½
Creosote, U.S.P., bottles	lb.	.40 @	.42
carbonate, bottles, carboys	lb.	1.50 @	1.60
Crotonaldehyde, technical, car lots, drums	lb.	.32 @	—
less car lots, drums	lb.	.36 @	—
drums	lb.	.10 @	—
less car lots, works, drums,			
Diethyleneglycol, car lots, works,	lb.	.13 @	—
monoethyl ether, car lots, drums	lb.	.13 @	—
less car lots, drums	lb.	.14 @	.15
monobutyl ether, car lots, drums	lb.	.25 @	—
less car lots, drums	lb.	.28 @	—
Dover's powder, U.S.P., cans	lb.	2.45 @	2.50
Duboisine sulphate, vials	oz.	30.00 @	—

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Emetine, hydrochloride, bottles, vials	oz.	35.00	@36.00
resale, bottles, vials	oz.	26.00	@28.00
Epsom salt, domestic, technical, bags, barrels	100 lbs.	1.70	@ 1.90
U.S.P., car lots, bags	100 lbs.	2.15	@ —
car lots, barrels	100 lbs.	2.25	@ —
less car lots, bbls	100 lbs.	2.50	@ 3.00
imported, technical, bags	100 lbs.	1.15	@ 1.20
U.S.P., barrels	100 lbs.	1.95	@ 2.00
Ergotin, jars	lb.	18.50	@19.00
Eserine salicylate, bottles, vials	oz.	40.00	@ —
sulphate, bottles, vials	oz.	40.00	@ —
Ether, concentrated, drums	lb.	.15	@ —
U.S.P., anesthesia, drums	lb.	.20	@ —
U.S.P., 1880, drums	lb.	.37	@ .38
washed, drums	lb.	.35	@ .36
Ether, nitrous, carboys, bottles,	lb.	.70	@ .92
Ethyl chloride, drums	lb.	.22	@ .24
Ethyl-methyl ketone, drums	lb.	.30	@ —
Ethyleneglycol, refined, drums	lb.	.25	@ .30
technical, cans	gal.	3.60	@ 3.75
Eucalyptol, cans	lb.	1.00	@ 1.05
Eugenol (see Essential Oils).			
Formaldehyde, car lots, barrels, f.o.b. works	lb.	.08½@	—
less car lots, barrels, f.o.b. spot	lb.	.08¾@	.09
Furfural, drums	lb.	.19¼@	—
tanks	lb.	.16¾@	—
works, drums	lb.	.17½@	—
tanks	lb.	.15	@ —
Fusel oil (see Lacquer Materials).			
Gelatin, silver, cases	lb.	.58	@ .59
Glycerin, C.P., drums extra	lb.	.15	@ .15½
cans	lb.	.16½	@ .17
dynamite, drums incl	lb.	.12½	@ .12¾
saponification, loose, drums	lb.	.08¾	@ .08½
soaplye, loose, drums	lb.	.07½	@ .07¾
30 degrees, yellow, drums	lb.	.14½	@ .15
Glycerophosphates— calcium, barrels, cans	lb.	1.40	@ 1.55
manganese, barrels, cans	lb.	2.90	@ 3.10
potash solution, 75 p.c., barrels, cans	lb.	1.35	@ 1.50
soda, crystals, barrels, cans	lb.	1.40	@ 1.55
solution, U.S.P., bottles, cans, demijohns	lb.	1.03	@ 1.20
Guaiacol carbonate, boxes, kegs	lb.	1.70	@ 2.50
liquid, bottles, demijohns	lb.	1.75	@ 2.00
Haarlem oil, domestic, cases, per gross		3.25	@ 3.30
imported, cases, per gross		3.50	@ 3.55
Hexamethylenetetramine, domestic, drums	lb.	.52	@ .54
Homatropine hydrobromide, bottles, vials	oz.	13.50	@14.50
Hydrastine, alkaloid, vials	oz.	20.50	@21.00
resale, vials	oz.	19.00	@20.00
hydrochloride, vials	oz.	20.50	@21.00
sulphate, vials	oz.	22.50	@ —
Hydrogen peroxide, barrels	lb.	.04	@ —
bottles	gross	7.75	@18.50
Hydroquinone, kegs	lb.	1.25	@ 1.30
Hyoscine hydrobromide, vials	oz.	13.00	@13.50
Hyoscyamine alkaloid, vials	oz.	25.00	@ —
hydrobromide, vials	oz.	40.00	@ —
sulphate, vials	oz.	25.00	@ —
Hypophosphites— ammonium, barrels	lb.	1.10	@ 1.20
calcium, cans	lb.	.60	@ .65
iron, cans	lb.	1.60	@ 1.65
magnesium, cans	lb.	1.15	@ 1.20
potash, cans	lb.	.80	@ .85
soda, cans	lb.	.70	@ .75
Ichthyol, bottles	lb.	4.00	@ 4.25
Iodides— ammonium, jars	lb.	5.20	@ —
arsenous, bottles, jars	lb.	6.35	@ 6.85
arsenous-mercuric solution, bottles	lb.	.25	@ —
barium, bottles	lb.	5.25	@ —
cadmium, bottles, jars	lb.	4.55	@ —
calcium, bottles, jars	lb.	4.35	@ —
copper, bottles	lb.	6.22	@ 6.27
ethyl, bottles	lb.	6.35	@ —
iron, bottles	lb.	4.30	@ 4.40
syrup, demijohns	lb.	.35	@ .65
lead, jars	lb.	3.20	@ —
lithium, bottles, jars	lb.	5.40	@ —
manganese, bottles, jars	lb.	6.40	@ —
mercury, green or yellow, jars, kegs	lb.	4.80	@ 4.96
red, jars, kegs	lb.	4.89	@ 5.05
potassium, barrels, fiber drums	lb.	3.75	@ 3.80
sodium, jars	lb.	4.25	@ 4.30
starch, bottles	lb.	1.77	@ —
strontium, jars	lb.	4.00	@ 4.10
sulphur, bottles, jars	lb.	4.55	@ —
thymol, barrels	lb.	6.50	@ 6.75
zinc, bottles, jars	lb.	5.20	@ 5.70
Iodine, resublimed, kegs	lb.	4.65	@ 4.70
Iodoform, kegs	lb.	6.00	@ 6.05
Iron chloride, U.S.P., lump, barrels	lb.	.06	@ .08
solution, U.S.P., carboys	lb.	.05½	@ .07
phosphate, ferric, cans	lb.	.55	@ .69
ferrous, cans	lb.	.29	@ .34
pyrophosphate, cans	lb.	.74	@ —
reduced, 90 percent, cases	lb.	.65	@ .75
sulphate, U.S.P., crystals, barrels	lb.	.04½	@ .05
Isinglass, Russian, cases	lb.	4.50	@ 6.50
Lanolin (see adeps lanae).			
Licorice extract, mass, cases	lb.	.18	@ .20
powdered, barrels	lb.	.33	@ .34
Lithium carbonate, barrels	lb.	1.50	@ 1.60
citrate, barrels	lb.	1.70	@ 1.80
Magnesia, calcined, U.S.P., barrels	lb.	.45	@ .60
carbonate, technical, bags	lb.	.06	@ .07
barrels	lb.	.07	@ .08
U.S.P., barrels	lb.	.08	@ .09
Manganese dioxide, precipitated, U.S.P., kegs	lb.	.40	@ .50
Menthol, imported, cases	lb.	5.00	@ 5.25
synthetic, tins	lb.	3.00	@ 3.25
Mercurials, hard— bisulphate, kegs	lb.	1.63	@ —
calomel, boxes, kegs	lb.	2.05	@ —
corrosive sublimate, fiber drums, kegs	lb.	1.65	@ 1.80
oxide, black, fiber drums, kegs	lb.	3.95	@ 4.20
yellow, U.S.P., fiber drums, kegs	lb.	2.57	@ 2.72
red precipitate, fiber drums, kegs	lb.	2.16	@ —
white precipitate, fiber drums, barrels	lb.	2.24	@ —
soft— blue mass, U.S.P., cans, kegs,	lb.	1.02	@ 1.05
citrine ointment, jars, tubs,	lb.	.67	@ —
mercury and chalk, fiber drums, kegs	lb.	.92	@ —
ointment, 30 p.c. cans	lb.	.91	@ —
33⅓ p.c., cans	lb.	.94	@ —
50 p.c., cans	lb.	1.28	@ —
Methanol, denaturing grade, tanks	gal.	.50	@ —
95 p.c., barrels	gal.	.54	@ .56
drums	gal.	.48	@ .50
tanks	gal.	.45	@ —
97 p.c., barrels	gal.	.56	@ .59
drums	gal.	.50	@ .53
tanks	gal.	.47	@ —
purified, barrels	gal.	.57	@ .59
drums	gal.	.51	@ .53
tanks	gal.	.50	@ —
synthetic, car lots, drums	gal.	.47	@ —
less car lots, drums	gal.	.51	@ —
tanks, works, frt. alld	gal.	.42½	@ —
Methyl acetone, drums	gal.	.83	@ .87
tanks	gal.	.80	@ —
salicylate, drums	lb.	.40	@ .43
tins	lb.	.42	@ .45
resale, tins	lb.	.40	@ .41
Methylene blue, medicinal, kegs	lb.	2.00	@ 2.25
Milk powder, skimmed, barrels,	lb.	.10	@ .12
unskimmed, barrels	lb.	.26	@ .28
Morphine acetate, bottles, vials	oz.	7.75	@ 7.80
alkaloid, cans	oz.	9.65	@ 9.70
ethyl hydrochloride, vials	oz.	9.25	@ 9.30
hydrobromide, cans	oz.	7.75	@ 7.80
hydrochloride, cans	oz.	7.75	@ 7.80
sulphate, cans	oz.	7.75	@ 7.80
Musk, Cabardine, grained, bottles	oz.	No stocks.	
pods, bottles	oz.	No stocks.	
Tonquin, grained, bottles	oz.	30.00	@32.00
pods, bottles	oz.	20.00	@21.00
Opium, U.S.P., cases	lb.	12.00	@13.00
granulated, U.S.P., cans	lb.	13.00	@14.00
powdered, U.S.P., cans	lb.	13.00	@14.00
Oxalates— ammonium, crystals, barrels, kegs	lb.	.28	@ .30
cerium, barrels	lb.	.32	@ .33
iron, scales, cans	lb.	.90	@ .91
powdered, kegs	lb.	.52	@ .53
iron-ammonium, barrels, kegs,	lb.	.34	@ .36
potassium, kegs	lb.	.49	@ .50
sodium, barrels, kegs	lb.	.30	@ .32
potassium, crystals, barrels	lb.	.23	@ .25
sodium, neutral, powder, barrels	lb.	.39	@ .43
Paraldehyde, technical, drums	lb.	.20½	@ .23
U.S.P., carboys	lb.	.53	@ .55
Paraformaldehyde, kegs	lb.	.40	@ .42½
Phenolphthalein, U.S.P., barrels, drums	lb.	1.10	@ 1.20
Phenylhydrazin hydrochloride, bottles	lb.	9.00	@ —
Pilocarpine hydrochloride, bottles, vials	oz.	3.25	@ 3.50
resale, vials	oz.	2.50	@ 2.75
nitrate, bottles, vials	oz.	3.25	@ 3.50
Podophyllin, U.S.P., tins	lb.	4.25	@ 4.30
Potash acetate, barrels	lb.	.29	@ .30
bicarbonate, U.S.P., crystals, barrels	lb.	.13	@ .14
granular, barrels	lb.	.13	@ .17
carbonate, U.S.P., granular, barrels	lb.	.12	@ —
powder, fine, barrels	lb.	.14	@ —
chlorate, U.S.P., granular, kegs	lb.	.16	@ .17
powder, kegs	lb.	.11	@ .14
guaiacol sulphonate, cans	lb.	1.95	@ 2.25
permanganate, U.S.P., drums,	lb.	.15	@ .15½
sulphate, N.F., barrels	lb.	.13	@ .16
Quicksilver, 76-lb. flasks, net per flask.		130.00	@132.00
Quinidine alkaloid, cans	oz.	.70	@ .75
sulphate, cans	oz.	.50	@ —
Quinine acetate, cans	oz.	.78	@ —
alkaloid, cans	oz.	.55	@ —
arsenate, cans	oz.	.78	@ —
arsenite, cans	oz.	.78	@ —
benzoate, cans	oz.	.78	@ —
bisulphate, cans	oz.	.40	@ —
Japanese, tins	oz.	.40	@ —
resale	oz.	.38	@ .39
Swiss	oz.	.40	@ —
citrate, cans	oz.	.51	@ —
dihydrobromide, bottles	oz.	.54	@ —
dihydrochloride, bottles	oz.	.54	@ —
ethylcarbonate, cans	oz.	.58	@ —
ferrocyanide, cans	oz.	.78	@ —
formate, cans	oz.	.73	@ —
glycerophosphate, cans	oz.	.80	@ —
hydrobromide, cans	oz.	.50	@ —
hydrochloride, cans	oz.	.50	@ —
hydrochloride and urea, cans	oz.	.78	@ —
hydrochlorosulphate, cans	oz.	.54	@ —
hydroiodide, cans	oz.	.78	@ —
hypophosphite, cans	oz.	.70	@ —
lactate, cans	oz.	.66	@ —
phosphate, cans	oz.	.62	@ —
salicylate, cans	oz.	.52	@ —
sulphate, domestic, tins	oz.	.40	@ —
Dutch, tins	oz.	.40	@ —
Japanese, tins	oz.	.40	@ —
Swiss, tins	oz.	.40	@ —
sulphocarbolate, cans	oz.	.78	@ —
tannate, cans	oz.	.41	@ —
tartrate, cans	oz.	.78	@ —
valerate, cans	oz.	.78	@ —
Quinine-urea hydrochloride, cans,	oz.	.54	@ —
Resorcinol, U.S.P., f.o.b. works, cans, kegs	lb.	1.75	@ —
Rochelle salt, crystals, boxes, kegs	lb.	.23	@ —
powder, barrels, kegs	lb.	.23	@ —
Rosewater, triple, per demijohn	lb.	5.50	@ 5.75
Saccharin, 1,000-lb. lots, cans	lb.	1.70	@ —
smaller lots, cans	lb.	1.75	@ 1.90
Salicin, cans	lb.	4.65	@ 5.75
Salol, kegs	lb.	.90	@ .95
Santonin, crystals, cans	lb.	130.00	@140.00
Saponin, tins	lb.	1.15	@ 1.50
Seidlitz mixture, barrels, kegs,	lb.	.18½	@ —
Silver bullion	oz.	.57½	@ —
nitrate, vials	oz.	.40⅝	@ —
nucleinate, vials	oz.	.35	@ .36
proteinate, vials	oz.	.30	@ .37
Soda benzoate, U.S.P., bbls	lb.	.50	@ .53
biphosphate, U.S.P., barrels	lb.	.30	@ .34
cacodylate, jars	lb.	4.75	@ 5.90
caustic, U.S.P., sticks, cans	lb.	.19	@ .23
cyanide (see Industrial Chemicals, page 10).			
perborate, N.F., barrels	lb.	.20	@ .25
phosphate, dibasic, U.S.P., granular, barrels	lb.	.07½	@ .08
salicylate, boxes	lb.	.47	@ .49
resale, boxes	lb.	.45	@ .46
sulphocarbolate, barrels	lb.	.30	@ .32
Sparteine sulphate, bottles, cans,	oz.	.70	@ .80
Strontium carbonate, pure, barrels	lb.	.25	@ .30
Strychnine acetate, cans	oz.	.65	@ —
alkaloid, crystals, cans	oz.	.66	@ —
powder, cans	oz.	.56	@ —
arsenate, cans	oz.	.65	@ —
glycerophosphate, cans	oz.	.65	@ —
hydrobromide, cans	oz.	.65	@ —
hydrochloride, cans	oz.	.65	@ —
hypophosphite, cans	oz.	.75	@ —
nitrate, cans	oz.	.60	@ —
phosphate, cans	oz.	.55	@ —
sulphate, crystals, cans	oz.	.56	@ —
powder, cans	oz.	.46	@ —
Sugar coloring, barrels	gal.	.72	@ .73
Sugar of milk, barrels	lb.	.21	@ .21½
Sulphonmethane, kegs	lb.	2.65	@ 2.75
Sulphonethylmethane, kegs	lb.	2.85	@ 3.95
Sulphur, commercial (see Industrial Chemicals).			
flowers, bags	100 lbs.	3.10	@ 3.65
barrels	100 lbs.	3.45	@ 4.00
precipitated, kegs	lb.	.15	@ .17
Tartar emitic, technical, crystals, barrels	lb.	.27½	@ .27½
powder, barrels	lb.	.27½	@ .27½
U.S.P., powder, barrels	lb.	.32½	@ .34
Tartaric acid (see Industrial Chemicals, page 10).			
Terebene, cans	lb.	.75	@ .85
Theobromine, alkaloid, cans	lb.	1.70	@ 2.25
sodiosalicylate, cans	lb.	2.10	@ 2.25
Terpin hydrate, kegs	lb.	.45	@ .48
Thymol, bottles	lb.	2.50	@ 2.65
Vanilin, tins	lb.	6.25	@ 6.80
Venice turpentine, true, cases	lb.	.29	@ .30
Witch hazel extract, distilled, N.F., barrels	gal.	.70	@ .90
Yohimbine hydrochloride, vials	oz.	2.75	@ 3.50
Zinc carbonate, precip., U.S.P., powder, barrels	lb.	.28	@ .30
oxide, U.S.P., barrels	lb.	.14½	@ .18
stearate, U.S.P., barrels	lb.	.24	@ .26
sulphocarbolate, N.F., barrels	lb.	.28	@ .30

National Wholesale Druggists' Program

Fifty-fourth Annual Meeting Is to Be Held at Atlanta, October 1 to 5

The program of the fifty-fourth annual meeting of the National Wholesale Druggists' Association, October 1 to 4, at Atlanta, follows:—

Business Program

First Session

Monday, October 1, 9:30 a. m.

Georgian Ball Room, Biltmore Hotel

Call to order.
Invocation—Dr. Luther Rice Christie, pastor of Ponce de Leon Baptist Church.
Address of Welcome—Governor L. G. Harding of Georgia.
Reception of delegates and visitors from American Pharmaceutical Association, National Association of Retail Druggists, American Drug Manufacturers' Association, Proprietary Association, American Pharmaceutical Manufacturers' Association, Georgia Pharmaceutical Association and other associations.
Response to Address of Welcome and Greetings—W. L. Thompson.
Roll call.
Minutes of the fifty-third annual meeting.
President's address.
Appointment of committee on president's address.
Treasurer's report.
Secretary's report.
Report of national councillor to United States Chamber of Commerce.
Report of delegates to National Drug Trade Conference.
Reports of committees:—
(a) Arrangements and Entertainment — Harrison Jones, chairman.
(b) Rates and Routes — Romaine Pierson, chairman; by R. A. Whidden, vice-chairman.
(c) Drug Market—Joseph A. Huisking, chairman.
(d) Employment and Welfare—J. T. Coulson, chairman.
(e) Trade Marks—F. F. Ingram, Jr.
(f) Local Associations—Sewall Andrews.
(g) Memorials of Deceased Members—Harry J. Schnell, Chairman.
Discussion to follow each report.
Invitations for fifty-fifth convention.
Announcements and communications.
Appointments of special committees on:—
(a) Auditing Treasurer's Report.
(b) Nominations.
(c) Time and Place of Next Meeting.
New business.
Adjournment.

Note 1.—Under the heading "New business," members are requested to bring before the convention at each session those matters they would like to have discussed or acted upon by the association at this meeting.

Note 2.—Committee chairmen desiring to call their committees together for meetings are requested to notify the secretary, who will secure suitable quarters and advise members of the time and place of such meetings.

Monday, 10 p. m.

Joint meeting of Senior Council and Board of Control.

Second Session

Tuesday, October 2, 9 a. m.

Georgian Ball Room, Biltmore Hotel

Call to order.
Minutes of first session.
Reports of committees:—
(a) Membership—J. C. O'Dell, chairman.
(b) Quality of Medicinal Products—A. C. Boylston, chairman.
(c) Insurance—P. A. Hayes, chairman.
(d) Joint Report of Committees on Proprietary Goods—H. H. Robinson, chairman, and Special Committee on Accounting—W. W. Gibson, chairman.
(e) Special Report by Board on Revision of Constitution and By-Laws—C. Mahlon Kline, chairman.
(f) Delivery and Traffic—E. S. Fitzgerald, chairman.
Discussion to follow each report.
New business.
Announcements and communications.
Adjournment.

Tuesday, October 2, 8 p. m.

Georgian Ball Room, Biltmore Hotel

Informal meeting, wholesale druggists only.

Third Session

Wednesday, October 3, 9 a. m.

Georgian Ball Room, Biltmore Hotel

Call to order.
Minutes of second session.
Election of new members.
Reports of committees:—
(a) Special Lines—John C. Davis, chairman.
(b) Salesmen and Selling Methods — R. M. Vliet, chairman.
(c) Legislation—C. Mahlon Kline, chairman.
(d) Prohibition Problems — Dr. William Jay Schieffelin, chairman.
Address—S. C. Henry, secretary, N.A.R.D.
Reports of committees:—
(a) Education and Research — A. Kiefer Mayer, chairman, and R. B. Whittlesey, vice-chairman.
(b) Druggists' Research Bureau—A. Kiefer Mayer, chairman.
(c) Credits and Collection—J. E. Stilz, chairman.
Discussion to follow each report.
New business.
Appointments of committee on thanks.
Announcements and communications.
Adjournment.

Wednesday, October 3, 8 p. m.

Grill Room, Biltmore Hotel

Informal meeting, wholesale druggists only.

Biltmore Hotel

Informal meeting, manufacturers.

Fourth Session

Thursday, October 4, 9 a. m.

Georgian Ball Room, Biltmore Hotel

Call to order.
Minutes of third session.
Reports of committees on:—
(a) Auditing.
(b) Nominations.
(c) Time and Place of Next Meeting.
Election of officers.
Reports of Board of Control:—
(a) Resolutions.
(b) Officers' Reports.
(c) Committee Reports.
Discussion to follow each report.
Unfinished business.
New business.
Report of committee on thanks (to be made at the banquet).
Installation of officers.
Thanks to retiring officers.
Adjournment.

Fifth Session

In the event that all business cannot be concluded in the four sessions, a fifth business meeting will be held Thursday, at 2:30 p. m., in the Japanese Tea Room.

Entertainment Program

Sunday, September 30

8:30 to 10:30 p. m.

Concert in conjunction with broadcasting over WSB.

Monday, October 1

9:30 a. m.

Ladies are invited to attend opening business session in the Georgian Ball Room.

2:30 p. m.

Ladies driven around the city, with tea at Capital City Country Club. Ladies will meet on street front of hotel promptly.

8:30 p. m.

Reception in honor of President Cutler and Miss Cutler, Georgian Ball Room, followed by dancing and buffet supper.

Tuesday, October 2

10:30 a. m.

Ladies will be taken on a trip to view the cyclorama of the Battle of Atlanta. Cars will leave promptly from street front of hotel.

8:30 p. m.

Dinner-dance at Piedmont Driving Club. (The entire atmosphere of this occasion will be distinctively Southern, and the chief function on your entertainment program. No one should miss this.) Take taxies at street front of hotel and say, "Piedmont Driving Club."

Wednesday, October 3

12:30 p. m.

Old-fashioned Southern barbecue at Druid Hills Club. Automobiles will leave promptly from street front entrance of the hotel.

2:30 p. m.

Trip to Stone Mountain. Automobile will leave the Druid Hills Club and proceed directly to Stone Mountain to view the Confederate Memorial, the greatest sculptural conception ever conceived by man, being carved on the largest solid rock in the world.

8:30 p. m.

Ladies' bridge party in Georgian Ball Room. Prizes.

Thursday, October 4

12:30 p. m.

Golf tournament, Druid Hills Club. All desiring to participate in the golf tournament will take cars at street front of hotel promptly. Lunch will be served, for those playing in the tournament, at the club.

1:30 p. m.

Exhibition golf match, Druid Hills Club, to be played by Robert T. Jones, Jr. (our own Bob) and other star players necessary to make up the foursome. This golf match is expressly staged for the benefit of the convention only. Take taxi in front of hotel to Druid Hills Club. The match will start promptly at 1:30.

7:30 p. m.

Banquet in Georgian Ball Room. The speakers at the banquet will be the retiring and incoming presidents of the N.W.D.A. and Con McCole (humorous dialectician). Toastmaster, G. Barrett Moxley.

Fluorine Mothproofing Patent Claim Allowed

WASHINGTON, Sept. 12, 1928.

The rejection by a patent office examiner of claim 5 of patent 1,682,975, issued to Ernst Meckbach for a process for protecting wool and fur from moths, has been reversed by the Board of Appeals of the United States Patent Office. The claim first rejected and now allowed, subject to an amendment specifying that the impregnation does not wash out and lose its efficiency as in other processes, follows:—

5. A moth proof article comprising a material liable to attack by moth having combined therewith in such manner as to be tenaciously retained thereby a moth-repelling inorganic fluorine compound in sufficient quantity to render said material moth proof.

U. S. Wants Chemists

The United States Civil Service Commission will hold competitive examinations for associate and assistant chemists. Applications must be on file with the commission at Washington not later than September 26. The examinations are to fill vacancies in the departmental service at Washington and in field branches. Entrance salaries are $3,200 for the associate grade and $2,600 for the assistant grade. Higher salaried positions are filled through promotion.

Applicants may select as optional subjects any of the following: (1) advanced inorganic chemistry; (2) analytical chemistry; (3) organic chemistry, and (4) physical chemistry. Competitors will not be required to report for examination at any place, but will be rated on their education, training, and experience, and on their publications or a thesis filed with the application.

Portugal has increased the import duty on perfumery, lotions and tinctures for the hair, dentrifices and cosmetics from 2 gold escudos per kilo to 2.5 escudos.

Botanical Drugs

Digitalis Shipments Delayed by Prohibition of Collection in Germany—Valerian Now More Valuable Property

A considerable change has come over the market for botanical drugs during the past week. The tendency toward price shading to conform with movements in the first costs of new crop goods seemed to have been abandoned in favor of a policy of firmer prices and a return of quotations to the approximate levels ruling earlier in the summer. A fair volume of demand with firmer replacement costs tended to put the local market into a considerably improved position.

Reports of special conditions abroad have indicated that some special items go into the main consumption season of the year in very firm if not actually strong position. Among such items were arnica and lavender flowers, digitalis leaves, chamomile flowers, and valerian root. Every one of these articles were advanced in spot prices because of adverse reports in Europe. Drought hit the lavender crop just when conditions seemed to forecast an ample crop and lower prices. Digitalis leaves were very high in price for the reason that early collection was prohibited by the German government and hence deliveries on contracts are badly delayed if not entirely abandoned. The chamomile crop throughout Europe was a disappointment, being far subnormal and not showing better than fair quality. Valerian root abroad was higher than spot prices in the previous week. Root of a quality meeting U.S.P. requirements was quite scarce and hence importers here readjusted their spot prices to conform with the advancing market for replacement supplies. Arnica flowers were advanced sharply in the to-arrive position. Import cost late last week was 100 percent higher than it was when the first shipment offerings were made. In addition to these specific items was almost the entire list of Spanish articles. All agricultural crops in Spain have been far from normal and the entire group seemed to be destined for higher prices.

Higher prices for domestic items followed the swing which had put many of them too low to conform with present costs in the primary market. Low sellers withdrew previous offerings and restablished their holdings at levels more in line with costs and general views locally.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced (See preceding column)
Angostura bark, 3c. per lb.	Barberry, root bark, 1c. per lb.
Arnica flowers, to arrive, 25c. per lb.	tree bark, ½c. per lb.
Bayberry bark, ½c. per lb.	Buckthorn berries, 5c. per lb.
Black haw, root bark, 1c. per lb.	Bloodroot, ½c. per lb.
tree barks, ½c. per lb.	Canary, Argentine, ¼c. per lb.
Balm of Gilead buds, 12c. per lb.	Celery, ¼c. per lb.
Caraway, ¼c. per lb.	Coriander, Morocco, ¼c. per lb.
Canella alba, 2c. per lb.	Cumin, Malta, ¼c. per lb.
Cramp bark, genuine, 10c. per lb.	Morocco, ¼c. per lb.
Chamomile, Hungarian, 1c. per lb.	Clove, ¼c. per lb.
Roman, 5c. per lb.	Elm, grinding, 1c. per lb.
Cornsilk, ½c. per lb.	Linden, no leaves, 1c. per lb.
Digitalis, 5c. per lb.	Stramonium, ½c. per lb.
Euphorbia Pil, 1½c. per lb.	St. Ignatius beans, 3c. per lb.
Elm, powdered, 1c. per lb.	Vanilla, Mexican, 25c. per lb.
Ephedra vulgaris, 2c. per lb.	Wild cherry, rossed thin green, ½c. per lb.
Fish berries, ½c. per lb.	
Fennel, French, 2c. per lb.	
Horehound, ½c. per lb.	
Lady slipper root, 5c. per lb.	
Lemon peel, 1½c. per lb.	
Lavender, select, 2c. per lb.	
Lobelia, 1½c. per lb.	
Lycopodium, 5c. per lb.	
Malva, blue, 10c. per lb.	
Mustard, English, yellow, ¼c. per lb.	
Poppy flowers, red, 10c. per lb.	
Passion flower, 1½c. per lb.	
Pulsatilla, 1c. per lb.	
Poppy seed, ¾c. per lb.	
Paprika, extra fancy, ½c. per lb.	
fancy, ½c. per lb.	
medium, ½c. per lb.	

Comparative Values

Index numbers compiled from forty typical botanicals on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
123	119.9	123.5	127

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Current prices on botanical drugs, formerly printed on pages 6 and 8, are now printed at the end of this market report.

Balsams

Copaiba.—Needs of most buyers were small and hence the market continued somewhat easy and not the least inclined toward an early improvement in the matter of prices.

Fir.—Steady prices prevailed under influence of routine trading. Stocks were ample for requirements considerably larger than those current last week.

Barks

Angostura.—After a very long period of inactivity as to prices, quotations were raised 3c. to the basis of 21c. to 22c. per pound.

Barberry.—Root was 1c. lower at 19c. to 20c. per pound and tree was down ½c. to the basis of 11c. to 12c. per pound. This conformed with new crop movements and prices.

Black Haw.—Readjustment of prices to a slightly higher level brought local sellers to a basis nearly uniform. Root bark was priced 27c. to 28c. per pound; tree, 15c. to 16c.

Canella.—Lower priced material was withdrawn from the market following substantial sales. Quotations were 2c. higher at 30c. to 31c. per pound.

Cramp.—The lowest spot price for genuine cramp bark was found to have been driven out of line with the actual market and the present cost of replacement. Quotations were 10c. higher at 45c. to 50c. per pound.

Elm.—Grinding bark was 1c. lower at 12c. to 13c. per pound but powder could not be obtained under 20c. to 21c.

Lemon Peel.—This article was in light supply and prices were 1½c. higher at 11c. to 12c. per pound.

Sassafras.—Prime quality select bark was not obtainable locally for less than 27c. to 28c. per pound while for the ordinary 16c. to 17c. seemed to be minimum. All merchandise available at lower prices recently had been withdrawn late in the period.

Beans

St. Ignatius.—The market was nominal, lacking demand. Prices were 3c. lower at 13c. to 14c. per pound, being at a level warranted by the stock held on spot.

Vanilla.—Mexican whole beans were 25c. lower at $3.25 to $4.50 per pound, according to quality. Other kinds were unchanged. The market reported business no better than fair. Foreign markets were declared to be steady but quiet. Offerings from Marseilles were said to be not numerous, it being too early for new crop to become influential.

Berries

Buckthorn.—Lower prices, light demand, and moderate stocks were the

Valuable information on Imports and Exports of Botanical Drugs is given in port lists beginning on page 5.

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Aloes	Henbane Leaves	Rhubarb Root
Asafoetida Gum	Ipecac Root	Senna Leaves
Belladonna Leaves	Juniper Berries	Squills
Buchu Leaves	Karaya Gum	Strophanthus Seed
Cinchona Bark	Kola Nuts	Sundew
Colocynth Pulp	Lavender Flowers	Tonga
Digitalis Leaves	Licorice Root	Tragacanth Gum
Doggrass	Mastic Gum	Uva Ursi Leaves
Ergot	Myrrh Gum	Valerian Root
Eucalyptus Leaves	Orris Root	Wormseed Levant
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Gentian Root	Quince Seed	Zedoary Root

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Barbadoes Tar	Fluid Extract Cascara Sagrada	Olive Oil Italian
Bay Rum Domestic	Gum Benzoin	Olive Oil Spanish
Bay Rum St. Thomas	Gum Benzoin Powd.	Precipitated Chalk Sturgis
Calcined Soot	Gum Euphorbium Powd.	Silex
Cascara Sagrada Powd.	Gum Myrrh Granul.	Skunk Oil
Cassia Fistula	Gum Myrrh Powd.	Socotrine Aloes Powd.
Charcoal Willow	Gum Olibanum	Tamarinds
Cod Liver Oil	Gum Olibanum Powd.	Tincture Green Soap
Colchicum Root Powd.	Jalap Root Ground	Venice Turpentine Artificial
Cuttle Fish Bone		Zinc Oxide Hubbucks

rule. Quotations were 40c. to 41c. per pound.

Fish.—A firmer undertone prevailed generally, though demand was not very prominent. Stocks were moderate but sufficient for current takings. Prices were 6½c. to 7c.

Flowers

Arnica.—Reports late in the week recorded an advance of 25c. per pound in the asking quotations for new crop flowers to arrive later. Some quarters advanced such quotations 35c. This rise was due to the fact that the import cost has about doubled since the opening prices were first received in this market. The lowest price, to arrive, was 90c. per pound, and for goods due the 26th of this month, $1 per pound was asked.

Chamomile. — Hungarian flowers were strong, due to underproduction. Prices were 1c. higher at 19c. to 20c. per pound. Roman were strong, offered seldom, and prices had an upward tendency at 23c. to 24c. per pound for a good quality.

Insect (Pyrethrum).—Imports of flowers for the first 7 months of this year totaled 8,839,972 pounds as compared with 6,410,208 pounds during the equivalent period, 1927. The market held a strong undertone with demand for powder reported to good and with full prices being paid.

Malva.—Blue was higher at 55c. to 60c. per pound, but black was unchanged.

Rose.—Red was revalued at $1.80 to $2 per pound and the inside was very firm at the advance of 15c.

Herbs

Cannabis.—A fine quality of this article free from stems and seeds was available locally at 30c. per pound, being U.S.P. in grade.

Ephedra Vulgaris.—Quotations were 2c. higher at 16c. to 17c. per pound, lower priced merchandise being withdrawn.

Passion Flower.—The situation in the primary market has changed and low sellers on the spot have come up to the bases of 9c. to 9½c. per pound.

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The market is firmer to stronger everywhere.

Leaves

Digitalis.—Germany prohibited collection of this article earlier than June 1 this year. Therefore, deliveries on contracts in force have been delayed and the market has an exceptionally strong price position.

Senna.—Some new crop No. 3 is available and the first of the No. 2 grade is understood to be in port. Prices are very firm owing to the relatively high prices paid for a short crop this year.

Spearmint.—Primary market prices were stronger and spot quotations were moved 3c. higher to the basis of 26c. to 28c. per pound.

Stramonium.—Moderate request led to moderation of prices. Quotations were ½c. lower at 17½c. to 18c. per pound.

Miscellaneous

Balm of Gilead.—Buds available on the spot were well dried and the holders have charged off the loss in weight by advancing prices 12c. Quotations were 40c. to 45c. per pound.

Irish Moss.—Prime quality bleached material was out of the market. A medium quality was available at 10½c. per pound.

Lycopodium.—First hands seemed to be temporarily out of the market and the resale price became the spot market. Quotations were up 5c. to the basis of 73c. to 75c. per pound.

Roots

Blood.—A somewhat sluggish market well stocked with merchandise and an easy position in the primary market put spot prices ½c. lower at 17c. to 18c. per pound.

Lady Slipper.—A firmer market was noted, the low seller bringing prices up 5c. to the basis of 85c. to $1.10 per pound following sales at 80c.

Rhubarb.—High dried in cases was less prominent in spot offerings and the minimum price was 40c. to 41c. per pound according to quantity.

Valerian. — Merchandise conforming to the USP requirements was said to be scarce and worth more money in the primary market. Quotations were advanced 4c. to the basis of 16c. to 18c. per pound.

Seeds

Anise.—Malaga seed, the article most favored in commerce in this county, costs 15½c. per pound duty paid to import at present. New crop prices are higher all around and virtually no carryover exists. Advance in spot prices is being predicted by the trade.

Celery.—Lack of demand put the price down to 19¾c. to 20¼c. per pound.

Cumin.—Quotations were ¼c. lower at 12¾c. to 13¼c. per pound owing to the small request now current.

Fennel.—French was about out of the market and the market was nominal at a 2c. advance to 22c. per pound.

Mustard.—Prices were very strong. English yellow was ¼c. higher at 8¼c. to 8¾c. and Roumanian was offered at 6½c. to 7c. Underproduction rules in all countries.

Poppy.—Much better demand for spots and futures put spot quotations ¾c. higher to the basis of 9¼c. to 9¾c. per pound.

Spices

Clove.—Spot prices were ¼c. lower at 26¼c. to 26½c. per pound, but reports from the Far East made the market there much stronger.

Paprika.—The recent advance in Europe has been reflected here at last. Quotations were higher as follows: Extra fancy, 26c. to 26½c. per pound; fancy, 25c. to 25½c.; medium, 24½c. to 25c.

Peppers.—Blacks and whites were all higher, speculation in London and strong control of stocks everywhere, coupled with the very small holdings in this country, contributing to the advance. Quotations were: Black, Alleppy, 36½c. to 37c.; Lampong, 36c. to 36½c.; Singapore, 35c. to 36c.; Tellicherry, 38c. to 39c.; white, Muntok, 58c. to 59c.; Singapore, 57c. to 58c.

Current Prices

(For late price changes, see page 2)

Balsams

Copaiba, Para, cans	lb.	.33 @	.35
S.A., U.S.A., cans	lb.	.35 @	.37
Fir, Canada, cans	gal.	12.00 @	12.25
Oregon, bbls	gal.	1.00 @	1.30
Peru, drums	lb.	1.72½ @	1.75
Tolu, cans	lb.	1.00 @	1.10

Barks

Angostura, bales	lb.	.21 @	.22
Barberry root, bales	lb.	.19 @	.20
tree, bales	lb.	.11 @	.12
Bayberry, bags	lb.	.12½ @	.13
Black haw root, bales	lb.	.27 @	.28
tree, bales	lb.	.15 @	.16
Buckthorn, true, bales	lb.	.05 @	.06
Butternut bales	lb.	.08 @	.09
Canella alba, bales	lb.	.30 @	.31
Cascara sagrada, new crop, bales	lb.	.13 @	.14
one year old, bales	lb.	.14 @	.15
two years old, bales	lb.	.15 @	.16
four years old, bales	lb.	.17 @	.18
Cinchona, quills, short, bags	lb.	.58 @	.60
long, cases	lb.	.65 @	.75
broken, bags	lb.	.20 @	.28
chips, bags	lb.	.20 @	.28
Cocillana, bags	lb.	.33 @	.34
Condurango, bags	lb.	.14 @	.15
Cottonroot, bales	lb.	.13 @	.14
Cramp, genuine, bales	lb.	.45 @	.50
so-called, bales	lb.	.07 @	.08
Dogwood, domestic, bales	lb.	.06 @	.07
Jamaica, bales	lb.	.09 @	.10
Elm, grinding, bales	lb.	.12 @	.13
powdered, barrels, boxes	lb.	.20 @	.21
select, bundles, cases	lb.	.24 @	.25
Fringetree, bales	lb.	.22 @	.23
Lemon peel, bales	lb.	.11 @	.12
Orange peel, bitter, Curacao, bales	lb.	.10½ @	.11
sweet, bales	lb.	.08 @	.09
Pomegranate root, bags	lb.	No stocks	
tree, bags	lb.	.15 @	.16
Prickly ash, bales	lb.	.15 @	.16
Sassafras, ordinary, bales	lb.	.16 @	.17
select, bales	lb.	.27 @	.28
Simarubra, bales	lb.	.20	Nom.
Soap, bales	lb.	.13 @	.14
crushed, bales, barrels	lb.	.15½ @	.16
cut, bales, barrels	lb.	.15½ @	.16
powdered, barrels	lb.	.19 @	.20
Tonga, bales	lb.	.42 @	.45
Wahoo root, bales	lb.	.52 @	.52
tree, bales	lb.	.30 @	.31
White pine, bales	lb.	.07 @	.08
Wild cherry, thick, bales	lb.	.06 @	.06
rossed, bales	lb.	.09 @	.10
thin, bales	lb.	.07½ @	.08
rossed, green, bales	lb.	.11 @	.12

Beans

Calabar, bags	lb.	.23 @	.25
St. Ignatius, bags	lb.	.13 @	.14
Tonka Angostura, casks	lb.	1.65 @	1.85
Vanilla, Bourbon, tins	lb.	1.75 @	2.15
Mexican, whole, tins	lb.	3.25 @	4.50
cuts, tins	lb.	2.00 @	2.75
South American, tins	lb.	2.50 @	2.75

Berries

Buckthorn, bags	lb.	.40 @	.41
Cubeb, XX, bags	lb.	.37 @	.38
powdered, cases, bags	lb.	.42 @	.44
Fish (coculus indicus), bags	lb.	.06½ @	.07
Juniper, bags	lb.	.05¼ @	.06
Laurel, bales	lb.	.08 @	.09
Prickly ash, bales	lb.	.18 @	.19
Raspberry, dried, barrels	lb.	.55 @	.57
Saw Palmetto, bales	lb.	.10 @	.11
Sumac, bags	lb.	.07 @	.08

Flowers

Arnica, bales	lb.	1.10	Nom.
Borago, bales	lb.	.15 @	.16
Calendula, bales	lb.	No stocks	
Chamomile, Hungarian, genuine, cases	lb.	.19 @	.20
Roman, bales	lb.	.23 @	.24
Clover tops, bales	lb.	.10 @	.15
Elder, bales	lb.	.18 @	.25
Insect (pyrethrum), powdered, closed, barrels, kegs	lb.	.47 @	.48
half closed, barrels, kegs	lb.	.44 @	.45
open, barrels, kegs	lb.	.42 @	.43
powdered, with stems, barrels, kegs	lb.	.28 @	.29
Lavender, ordinary, bales	lb.	.30 @	.35
Select, bales	lb.	.42 @	.45
Linden, with leaves, bales	lb.	.32 @	.33
without leaves, bales	lb.	.35 @	.36
Malva, black, bales	lb.	.45 @	.50
blue, bales	lb.	.55 @	.60
Mullein, cans	lb.	2.00 @	2.10
Orange, cases	lb.	.25 @	.30
Poppy, red, bales	lb.	.60 @	.61
Rose, red, bales	lb.	1.80 @	2.00
Rosemary, bales	lb.	.25 @	.30
Saffron, American, bales	lb.	.28 @	.30
Spanish, tins	lb.	11.50 @	12.00

Herbs

Boneset, bales	lb.	.09½ @	.10
Broomtops, bales	lb.	.10 @	.11
Cannabis, domestic, U.S.P., bales	lb.	.28 @	.30
Ephedra vulgaris, bales	lb.	.16 @	.17
Euphorbia pilulifera, bales	lb.	.09 @	.09½
Grindelia robusta, bales	lb.	.09 @	.10
Horehound, bales	lb.	.08 @	.09
Lobelia, bales	lb.	.15 @	.16
Marjoram, French, No. 1, bls.	lb.	.18 @	.19
German, bales	lb.	.15 @	.15½
Passion flower, bales	lb.	.08 @	.09
Pennyroyal, bales	lb.	.06 @	.08
Peppermint, bales	lb.	.13 @	.14
Pulsatilla, bales	lb.	.13 @	.14
Queen of the Meadow, bags	lb.	.07 @	.08
Rue, bales	lb.	.17½ @	.18
Savory, bales	lb.	.07½ @	.08
Skullcap, Eastern, bales	lb.	.38 @	.40
Western, bales	lb.	.20 @	.22
Tansy, bales	lb.	.10½ @	.11
Thyme, French, bales	lb.	.07¼ @	.07½
Spanish, bales	lb.	.05¾	Nom.
Wormwood, bales	lb.	.09 @	.10

Leaves

Aconite, bales	lb.	.11 @	.12
Belladonna, bales	lb.	.18 @	.22
Boneset, bales	lb.	.11 @	.12
Buchu, bales	lb.	.40 @	.41
Catnep, bales	lb.	.18 @	.20
Coltsfoot, bales	lb.	.09 @	.10
Conium, bales	lb.	.12 @	.13
Damiana, bales	lb.	.16 @	.17
Deer tongue, bales	lb.	.12 @	.13
Digitalis, bales	lb.	.50 @	.55
Eucalyptus, bales	lb.	.07 @	.08
Henbane, bales	lb.	.18 @	.19
Henna, bales	lb.	.12 @	.13
powdered, barrels, boxes	lb.	.15 @	.16
Jaborandi, bales	lb.	.10 @	.11
Laurel, Italian, bales	lb.	.04½	Nom.
Greek, bales	lb.	.05 @	.05½
Liverwort, bales	lb.	.20 @	.21
Malva, bales	lb.	.14 @	.15
Matico, bales	lb.	.30 @	.31
Mullein, bales	lb.	.07½ @	.09
Patchouli, bales	lb.	.23 @	.24
Peppermint, bales	lb.	.25 @	.28
Pichi, bags	lb.	.14 @	.15
Prince's pine, bales	lb.	.15 @	.16
Rosemary, bales	lb.	.05 @	.06
Sage, Greek, bales	lb.	.03½	Nom.
Dalmatian, bales	lb.	.05½ @	.06
Senna, Alex., whole, bales, cs.	lb.	.20 @	.21
half leaf, bales	lb.	.13 @	.14
siftings, bales	lb.	.10 @	.11½
Tinnevelly, No. 1, bales	lb.	.16 @	.18
No. 2, bales	lb.	.11 @	.12
No. 3, bales	lb.	.07½ @	.08
powdered, barrels, boxes	lb.	.09½ @	.10
pods, bales	lb.	.09½ @	.10
Spearmint, bales	lb.	.26 @	.28
Squaw vine, bales	lb.	.20 @	.21
Stramonium, bales	lb.	.17½ @	.18
Tansy, bales	lb.	.11 @	.12
Uva ursi, bales	lb.	.06 @	.06½
Witch hazel, bales	lb.	.07 @	.09
Yerba santa, bales	lb.	.09½ @	.10

Miscellaneous

Agaric, white, bales	lb.	.58 @	.60
Areca nuts, bags	lb.	.10 @	.11
Balm of Gilead buds, bags	lb.	.40 @	.45
Cassia fistula, baskets	lb.	.12 @	.15
Colocynth, pulp, bales	lb.	.50 @	.55
Corn silk, bales	lb.	.05½ @	.06
Dragon's blood, mass, cases	lb.	.65 @	.70
reeds, thin, cases	lb.	.90 @	.92
Ergot, spot, bags	lb.	1.00 @	1.10
Grains of paradise, bags	lb.	.45 @	.50
Guarana, cases	lb.	3.00 @	3.10
Hops, bales	lb.	.25 @	.26
Iceland moss, bales	lb.	.10 @	.12
Irish moss, ordinary, bales	lb.	.07 @	.08
bleached, prime, bales		No stocks	
Kamala, tins	lb.	.95 @	1.05
Kola nuts, bags	lb.	.12 @	.13
Lupulin, N.F., tins	lb.	1.65 @	1.75
Lycopodium, cases	lb.	.73 @	.75
Manna flakes, large, cases	lb.	.65 @	.70
small, cases	lb.	.48 @	.50
Nux vomica, bales	lb.	.05 @	.06½
powdered, barrels, boxes	lb.	.07½ @	.08
Papain, powdered, cases	lb.	3.50 @	3.75
Poppy heads, barrels	lb.	.55 @	.60
Quassia chips, bales	lb.	.06 @	.08
St. John's bread, bales	lb.	.05½ @	.06
Tamarind, barrels	lb.	.05 @	.05¼
kegs	keg	3.75 @	4.00

Roots

Aconite, U.S.P., bales	lb.	.20 @	.23
Aletris, bags	lb.	.36 @	.38
Alkanet, bales	lb.	.12 @	.13
Althea, cut, cases	lb.	.33 @	.35
Angelica, American, bales	lb.	.20 @	.22
Arnica, bales	lb.	.35 @	.36
Arrowroot, St. Vincent, powd., barrels	lb.	.09 @	.10
Belladonna, bales	lb.	.20 @	.22
Berberis aquifolium, bales	lb.	.11 @	.12
Beth, bales	lb.	.18 @	.19
Black Indian hemp, bales	lb.	.18 @	.20
Blood, bales	lb.	.17 @	.18
Bluflag, bales	lb.	.17 @	.18
Bryonia, bales	lb.	.11 @	.12
Burdock, bales	lb.	.10 @	.11
Calamus, bags	lb.	.06 @	.07
bleached, cases	lb.	.35 @	.42
Cohosh, black, bales	lb.	.07½ @	.08
blue, bales	lb.	.10 @	.12
Colombo, bales	lb.	.10 @	.11
Cranesbill, bales	lb.	.08½ @	.10
Culvers, bales	lb.	.18 @	.20
Dandelion, bales	lb.	.15 @	.17½
Doggrass, cut, bales	lb.	.11 @	.12
Echinacea, bales	lb.	.25 @	.27
Elecampane, bales	lb.	.08 @	.09
Galangal, bales	lb.	.12 @	.13
Gelsemium, bales	lb.	.10 @	.10½
Gentian, bales	lb.	.09½ @	.10
ground, barrels, boxes	lb.	.14 @	.15
powdered, barrels, boxes	lb.	.15 @	.16
Ginger (see Spices, page 8).			
Ginseng, cultivated, cases	lb.	8.00 @	12.00
wild, Southern, cases	lb.	8.50 @	10.00
fibers, cases	lb.	3.75 @	4.00
Golden seal, bales	lb.	3.90 @	4.00
powdered, boxes	lb.	4.60 @	4.70
Hellebore, white, pwd., bbls	lb.	.11 @	.12
Hydrangea, bales	lb.	.08 @	.09
Ipecac, Cartagena, bags	lb.	2.70 @	2.75
powdered, boxes	lb.	3.15 @	3.20
Rio, bags	lb.	2.80 @	2.85
powdered, boxes	lb.	3.20 @	3.25
Jalap, bales	lb.	.18 @	.20
powdered, barrels, boxes	lb.	.22 @	.24
Kava kava, bales	lb.	.14½ @	.15
Lady slipper, bales	lb.	.85 @	1.10
Licorice, bales	lb.	.05½ @	.08¼
powdered, barrels, boxes	lb.	.08 @	.09
selected, cases	lb.	.12½ @	.18
Lovage, American, bales	lb.	.35 @	.40
foreign, bales	lb.	.20 @	.22
Manaca, bales	lb.	.17 @	.18
Mandrake, bales	lb.	.13 @	.14
Musk, bales	lb.	.12 @	.13
Orris, Florentine, bags	lb.	.13 @	.13½
fingers, cases	lb.	.90 @	.95
powdered, barrels, boxes	lb.	.15 @	.16
Verona, bales	lb.	.11½ @	.12
powdered, barrels, boxes	lb.	.13½ @	.14
Pareira brava, bales	lb.	.11 @	.12
Pellitory, bales	lb.	.17 @	.18
Pink, true, bales	lb.	.60 @	.62
Pleurisy, bales	lb.	.20 @	.23
Poke, bales	lb.	.08 @	.09
Queen of the Meadow, bags	lb.	.07 @	.08
Rhatany, bags	lb.	.10½ @	.11½
Rhubarb, high dried, cases	lb.	.40 @	.41
powdered, barrels, kegs	lb.	.44 @	.45
Sarsaparilla, American, bales	lb.	.22 @	.25
Honduras, bales	lb.	.53 @	.54
Mexican, bales	lb.	.20 @	.21
Scammony, bags	lb.	.08¾ @	.09
Senega, bales	lb.	1.20 @	1.25
Serpentaria, bales	lb.	.70 @	.72
Skunk cabbage, bales	lb.	.16 @	.17
Snake, Canada, bales	lb.	.25 @	.27
Spikenard, bales	lb.	.20 @	.22
Squill, bales	lb.	.10 @	.12
powdered, barrels, boxes, bottles	lb.	.22 @	.23
Stillingia, bales	lb.	.10 @	.11
Stone, bales	lb.	.08 @	.09
Tonga, bales	lb.	.42 @	.45
Turmeric, Aleppy, bags	lb.	.09¼ @	.09¾
Bombay, bags	lb.	.08¼ @	.08¾
Madras, bags	lb.	.08½ @	.09
Unicorn, false (helonias), bales,	lb.	.68 @	.70
true (aletris), bags	lb.	.36 @	.38
Valerian, U.S.P., bales	lb.	.16 @	.18
Wild indigo, bags	lb.	.13 @	.14
Yellow dock, bales	lb.	.09 @	.10
Yellow (xanthoriza), bales	lb.	.13 @	.14

Seeds

Anise, Spanish, bags	lb.	.16 @	.17
star, bags	lb.	.22½ @	.23
Canary, Argentine, bags	lb.	.04½ @	.04¾
Morocco, bags	lb.	.05 @	.05½
Spanish, bags	lb.	.06	Nom.
Caraway, Dutch, bags	lb.	.09¼ @	.09¾
Cardamom, bleached, cases	lb.	1.20 @	1.75
decorticated, cases	lb.	1.40 @	1.45
green, bags	lb.	1.20 @	1.30
Celery, bags	lb.	.19¾ @	.20¼
Colchicum, bags	lb.	.35 @	.37
Coriander, Morocco, bags	lb.	.05½ @	.06
bleached, bags	lb.	.11½ @	.12
Russian, bags	lb.	.08 @	.08½
Cumin, Malta, bags	lb.	.12¾ @	.13¼
Morocco, bags	lb.	.12¾ @	.13¼
Dill, bags	lb.	.07¼ @	.07¾
cleaned, bags	lb.	.07¾ @	.08¼
Fennel, French, bags	lb.	.22	Nom.
German, bags	lb.	.25 @	.26
Fenugreek, bags	lb.	.04½ @	.05
Flea, black, bags	lb.	.18 @	.19
brown, bags	lb.	.12 @	.12½
Hemp, Manchuria, bags	lb.	.04 @	.05
Larkspur, bags	lb.	.40 @	.45
Lobelia, bags	lb.	.45 @	.50
Millet, bags	lb.	.04½ @	.05
hulled, bags	lb.	.06¾ @	.07½
Mustard, Bari, brown, bags	lb.	.10	Nom.
California, brown, bags	lb.	.10 @	.10¼
Chinese, yellow, bags	lb.	.07¼ @	.07¾
Dutch, yellow, bags	lb.	.07¼ @	.07¾
English, yellow, bags	lb.	.08¾ @	.08¾
Roumanian, yellow, bags	lb.	.06½ @	.07
Sicilian, brown, bags	lb.	.10¼ @	.10¾
Poppy, Dutch, bags	lb.	.09¼ @	.09¾
Indian, blue, bags	lb.	No stocks	
Pumpkin, bags	lb.	.10 @	.20
Quince, bags	lb.	.55 @	.95

(Continued on page 76)

ESSENTIAL OILS

New Lemon for January Delivery Sold at Prices Indicative of a High Market—Lavender Rises on Adverse News

Business in the market for essential oils was somewhat dull last week. Though undertones on spot seemed to be fairly steady, lack of important trading had a tendency to offset somewhat the feeling that values at present are rather firm. Hand-to-mouth orders were the rule and the business booked was usually placed under conditions rather more favorable to buyers than to sellers. The fact that changes in prices were few was found by some to indicate that the market as a whole was very firm.

A reversal in price trend in lavender oil was something of a feature. Drought hit the flower crop at a critical time and resulted mainly in a reduced yield of oil but also caused a decrease in the size of the crop. Furthermore, labor for gathering the flowers in the more mountainous districts was difficult to obtain and considerable material went uncollected. Prices for oil have been advanced in France, and the tendency on spot was upward last week.

Offerings of new crop citrous oils for January and forward arrival have resulted in some business being placed at prices which hold little hope for any material reduction in spot quotations over the next consuming year. The well-maintained prices for new crop, as well as for the holdover, contrasted with the easier undertone and the downward tendency in spot prices which featured the market last week. Lemon oil was definitely lower on spot.

Geranium oils continued to develop a stronger undertone, and Bourbon oil commanded higher prices once more in this market. The firmness of replacement costs and the absence of competition for export business was a strengthening factor most of the period under review. Patchouli was lower once again, thus emphasizing the presence of ample stocks of good quality oil in a market holding but modest manufacturing requirements at the present time.

Cassia was slightly higher in open quotations, but there was some reason to believe that competition would result in business being again booked at the former quotations. Wormseed was noted in a nominal advance, the price to consumers and to dealers on spot being separated moderately, to the disadvantage of the former. Peppermint remained firm as to spot price, but more disposition to sell was noted in the middle west.

Price Changes

Prices were changed during the past week as follows:—

Advanced	Reduced
Cassia, 10c. per lb.	Lemon, Messina, 10c. per lb.
Geranium, Bourbon, 15c. per lb.	Patchouli, 10c. per lb.
Wormseed, 5c. per lb.	Peppermint, redistilled, 5c. per lb.

Comparative Values

Index numbers compiled from twenty typical essential oils on the basis of a normal of 100 for August 1, 1914, compare as follows:—

Last week.	Prev. week.	Last month.	Last year.
166.3	165.9	168.7	124.4

Current prices are given at the end of this report. Price changes made Saturday up to noon and other last-minute market developments are reported on page 2.

Anise.—Normal request and steady prices prevailed and local dealers called the market firm.

Bergamot.—Little trade but unchanged prices was the rule last week. Foreign quotations held up well, considering the absence of interest in import parcels here.

Bois de Rose.—Inquiry was fair, and the movement into consumption served to keep prices to a very steady and generally well-maintained position.

Cananga. — Rectified material was considerably steadier and generally free from the competitive influences that recently put the market down. Demand was somewhat better.

Cassia.—The market was firmer and less competitive, and prices were 10c. higher at $2.25 to $2.35 per pound. Offerings were fairly liberal and the takings on account of consumers was moderate.

Cedarleaf.—Light trading was featured last week, and prices seemed to have a somewhat easy undertone again. Primary market prices were a bit firmer in most instances.

Cedarwood.—Absence of much competition was noted and prices were very steady under fair demand for export parcels at the close of last week.

Citronella.—Irregular inquiry and a conservative volume of sales prevailed locally last week. Prices seemed to be fairly steady, owing to a deal of stability noticeable in cables from the primary markets of supply.

Clove.—Advances in the price for spice in the primary market gave a strong undertone to the future delivery market for oil. The prompt position was not noticeably stronger, yet a disposition to avoid further concessions could be found here and there.

Coriander.—The market was slow and irregular, with the call being mainly for jobbing lots available at prices which seemed to be fairly steady last week.

Cubeb.—Low production costs and fairly keen competition in a quiet market accounted for the instability of spot prices and the general tendency toward competition.

Erigeron.—The tendency seemed to be to discount the future market in expectation of an excellent production of oil becoming available at comparatively low prices. Demand in general was a hand-to-mouth affair on the spot.

Geranium.—Bourbon oil came back with a further advance, the situation showing a rather marked reversal of trend recently dominant in all markets. Replacement prices were higher and generally stronger. Spot quotations were 15c. higher at $4.50 to $4.75 per pound.

Lavender.—A reversal of reports and price trend has developed in the foreign market. Cables have been received carrying the information that drought hit the crop in some districts, while in others labor refused to go into the less accessible places and bring out the flowers. One well-informed quarter last week stated that his French principal looked for a crop about 30 percent of normal. The prices from France were higher, but on spot they were unchanged.

Lemon.—Information in hand at this time does not suggest that new crop oil will be available in this market later on at prices substantially different from those now in force. The ideas concerning the value of oil for delivery here in January seem to be quite strong, and the sales already made would confirm such views. Local quotations were 10c. lower at $3.75 to $4.25 per pound last week, reflecting the influence of a continued lack of demand.

Lime. — Expressed lime was not available last week under $12 to $12.50 per pound, and some quarters were strong for the view that the outside price should be minimum. Offerings from the primary market were said to be comparatively light while the spot holding was negligible.

Linaloe.—The season in Mexico was reported at an end and hence prices have become nominal so far as replacement quantities from firsthands was concerned. Little demand was noted here, but for even small lots full prices were in force and had to be paid.

Orange.—Demand was sluggish and accounted for the lack of activity and the absence of much strength to local quotations. Stocks were of fair size and sellers seemed to be anxious for business. Reports from Italy made the market quiet but fairly steady in most instances.

Patchouli.—Competition was quite keen and prices were lowered 10c. to the basis of $6.15 to $6.50 per pound. Stocks of good quality merchandise seemed to be ample for current takings.

Peppermint.—More dealers were dis-

Current prices on essential oils, formerly printed on page 8, are now printed at the end of this market report.

Valuable information on Imports and Exports of Essential Oils is given in port lists beginning on page 5.

D. W. HUTCHINSON & CO., Inc.
ESSENTIAL OILS
45 CLIFF STREET NEW YORK

Users of
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SCHIMMEL & COMPANY
need not worry about market fluctuations like the present one—
We are prepared to write contracts, and
THE PRICE REMAINS THE SAME
Fully as strong — more active — less toxic
Write for information
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California Cold-Pressed
OIL *of* ORANGE
(MISSION BRAND—GUARANTEED U. S. P.)
Highest quality, absolutely pure, rich aroma, uniform color, fine flavor and carrying power—packed in 7 and 25-pound tins and shipped direct from either our Los Angeles plant or Chicago spot stocks. Our quotations are the lowest on the market. Correspondence invited.
CALIFORNIA CRUSHED FRUIT CORP.
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Oil Lemon
CALIFORNIAN
Richest in the natural flavor of fresh ripe Lemons
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MONTREAL: 10 ST. HELEN STREET

ESSENTIAL OILS
Our general catalog will acquaint purchasers with the merits of all our products in their various classifications together with basic size packages generally used.
Specialties
BALSAM FIR OREGON
BALSAM COPAIBA U. S. P.
MOHAWK BRAND OIL PEPPERMINT
CONCENTRATED FLAVORS
NATURAL MUSK
MAGNUS, MABEE & REYNARD, INC.
NEW YORK - U. S. A.
ESTABLISHED 1895

posed to offer new crop oil, but the prices wanted failed to attract many buyers in this market at least. It was understood that some business had been done at $3 and that some dealers refused less than $3.10 per pound. In the meantime little was done locally, and the market remained without change in local prices. Stocks were moderate to small.

Petitgrain.—Further cables indicated that the replacement position of this article was one of great firmness and that the tendency of prices was mainly upward. Local quotations were without further development in a rather quiet market.

Pimento.—The price for raw material was high and strong, but that for oil remained firm but without movement, expected due to the increasing cost of production.

Spearmint.—The western notion was that the market was very firm and so far as anything in this market was concerned, that view was an excellent one. Local dealers faced the fact that offerings were light and that holders in the primary market were able to await a larger request before moving their new crop material.

Wormseed.—The price to consumers was $2.35 to $2.50 per pound, but it was understood that transactions between dealers in this market had taken place for something under the inside figure. The market everywhere lacked activity.

Current Prices

(For late price changes, see page 2)

Essential Oils

Almond, bitter, artificial (see benzaldehyde, Coaltar Products).			
natural, bottles	lb.	2.75 @	3.00
SPA, bottles	lb.	2.90 @	3.00
sweet, true (expressed) cases	lb.	.67½@	.70
Apricot, kernel, drums	lb.	.44 @	.45
Amyris, balsamifera L (so-called "W. I. sandalwood"), tins.	lb.	2.20 @	2.45
Angelica root, bottles	lb.	18.00 @	19.00
Anise, lead free, U.S.P., tins	lb.	.56 @	.59
Bay, West Indian, tins	lb.	1.75 @	2.00
Bergamot, artificial, cans	lb.	2.00 @	3.25
natural Messina, coppers	lb.	5.00 @	6.25
Betula (see oil, sweet birch).			
Birch tar, crude, tins	lb.	.11 @	.14
rectified, tins	lb.	.40 @	.43
Bois de rose, Brazilian, tins	lb.	1.75 @	2.00
Cayenne, tins	lb.	2.50 @	2.75
Cade, U.S.P., tins	lb.	.25 @	.26
Cajeput technical, drums	lb.	.70 @	.75
U.S.P., fX, tins	lb.	.75 @	.77
U.S.P., X, tins	lb.	1.15 @	1.30
Calamus, tins	lb.	3.25 @	3.50
Camphor, sassafrassy, drums	lb.	.15½@	—
white, drums	lb.	.10½@	.11
Cananga, native, tins	lb.	3.20 @	3.45
rectified, tins	lb.	3.65 @	3.85
Capsicum (oleoresin), U.S.P., VIII. cans	lb.	3.25 @	3.50
Caraway, U.S.P., tins	lb.	1.75 @	1.85
Cardamom seed, bottles	lb.	26.00 @	28.00
Carvol, bottles	lb.	3.75 @	4.00
Cassia, redistilled, U.S.P., cans.	lb.	2.25 @	2.35
Cedarleaf, tins	lb.	1.00 @	1.10
Cedarwood, drums, tins	lb.	.26 @	.28
Celery seed, bottles	lb.	7.50 @	7.75
Cinnamon, Ceylon, bottles	lb.	10.00 @	10.50
Citronella, Ceylon, cans	lb.	.43 @	.45
drums	lb.	.41 @	.43
Java, drums	lb.	.48 @	.49
Clove, U.S.P., cans	lb.	1.75 @	1.80
Coriander seed, bottles	lb.	12.50 @	12.75
Croton, U.S.P., tins	lb.	.85 @	.95
Cubeb, U.S.P., tins	lb.	2.80 @	3.00
Cumin, bottles	lb.	7.00 @	7.50
Dill, bottles	lb.	3.75 @	5.75
Erigeron, tins	lb.	1.85 @	2.00
Eucalyptus, Australian, cases	lb.	.58 @	.60
drums	lb.	.57 @	.58
Fennel seed, sweet, tins	lb.	.80 @	.85
Gaultheria (see oil, wintergreen leaf).			
Geranium, Algerian, rose, tins	lb.	3.40 @	3.75
Bourbon, tins	lb.	4.50 @	4.75
Turkish, tins	lb.	3.00 @	3.25
Ginger, distilled, bottles	lb.	5.50 @	6.00
Hemlock, tins	lb.	.95 @	1.00
Juniper berries, terpeneless, tins,	lb.	14.00 @	16.00
U.S.P., tins	lb.	2.40 @	3.00
wood, tech., not U.S.P., tins	lb.	.50 @	.75
Lavender flowers, French, U.S.P., tins	lb.	2.60 @	5.00
garden, tins	lb.	.40 @	.45
spike, French, tech., tins	lb.	1.00 @	1.10
Spanish, tech., tins	lb.	.90 @	1.10
Lemon, American, tins	lb.	4.15 @	4.20
Messina, Copper, tins	lb.	3.75 @	4.25
Lemongrass, native, tins	lb.	.90 @	.95
Lime, distilled, tins	lb.	6.00 @	6.25
expressed, tins	lb.	12.00 @	12.50
Linaloe wood, cases	lb.	2.35 @	2.40
Mace, distilled, tins	lb.	1.65 @	1.75
Mustard, artificial, U.S.P., bottles	lb.	1.90 @	2.00
natural, U.S.P., bottles	lb.	9.00 @	10.00
Neroli, bigarde, bottles	lb.	75.00 @	100.00
petale, bottles	lb.	85.00 @	115.00
Nutmeg, U.S.P., tins	lb.	1.65 @	1.75
Orange, sweet, distilled, tins	lb.	6.50 @	6.75
expressed, American, tins	lb.	7.00 @	7.50
Messina, U.S.P., coppers	lb.	7.00 @	9.50
West Indian, tins	lb.	5.75 @	6.00
Origanum, commercial tins	lb.	.25 @	.50
Palmarosa, tins	lb.	3.00 @	3.25
Patchouli, bottles	lb.	6.15 @	6.50
Pennyroyal, American, tins	lb.	1.85 @	2.00
imported, tins	lb.	1.20 @	1.25
Peppermint, natural, cases	lb.	3.20 @	3.30
redistilled, U.S.P., tins	lb.	3.50 @	3.75
Petitgrain, Paraguay, tins	lb.	1.75 @	1.85
Pimento berries, tins	lb.	2.65 @	4.00
Pine needle, Siberian, cans	lb.	.70 @	.80
Rose, artificial, bottles	oz.	2.00 @	3.00
natural, coppers	oz.	12.50 @	15.00
Rosemary, flowers, technical, tins	lb.	.32½@	.35
U.S.P., tins	lb.	.45 @	.50
Safrol (see Perfume Materials, page 8).			
Sandalwood, E I., U.S.P., tins	lb.	7.00 @	7.10
Sassafras, artificial, drums	lb.	.25 @	—
natural, tins	lb.	.80 @	1.15
Savin, tins	lb.	1.65 @	1.75
Spearmint, U.S.P., cases	lb.	4.35 @	4.50
Spruce, tins	lb.	.95 @	1.00
Sweet birch, Northern, tins	lb.	2.25 @	2.75
Southern, tins	lb.	1.70 @	1.80
Tansy, tins	lb.	4.15 @	4.25
Terpineol (see below).			
Thyme, red, tins	lb.	.70 @	.80
white, tins	lb.	.85 @	.90
Vetiver, Bourbon, bottles	lb.	6.00 @	6.75
Wintergreen leaf, Northern, tins.	lb.	7.00 @	8.50
Southern, tins	lb.	3.50 @	3.75
sweet birch (see oil, sweet birch).			
synthetic (see methyl salicylate, Drugs and Fine Chemicals).			
Wormseed, tins	lb.	2.35 @	2.50
Wormwood, tins	lb.	16.00 @	18.00
Ylang ylang, Bourbon, bottles.	lb.	10.00 @	13.00
Manila, bottles	lb.	26.00 @	36.00

Perfume Materials

Acetophenone, bottles	lb.	3.00 @	4.00
Amyl butyrate, bottles	lb.	1.60 @	3.00
salicylate, cans	lb.	1.15 @	2.00
Anethol, bottles	lb.	1.20 @	1.50
Anisic aldehyde, C.P. (liquid aubepine), bottles	lb.	3.25 @	3.75
Benzaldehyde, U.S.P. (see Coaltar Products).			
Benzyl acetate, F.F.C., bottles.	lb.	1.05 @	1.85
alcohol, A.M.A., cans	lb.	1.00 @	2.25
Benzyl benzoate, A.M.A., F.F.C., tins	lb	1.20 @	1.40
formate, cans	lb.	3.15 @	4.00
Benzylidin acetone, bottles	lb.	3.25 @	3.75
Borneol, bottles	lb.	2.75 @	3.00
Cinnamic acid (see Industrial Chemicals).			
alcohol, bottles	lb.	3.35 @	5.75
aldehyde, F.F.C., bottles	lb.	2.50 @	3.00
Citral, 100 percent, cans	lb.	2.75 @	3.00
Citronellal, bottles	lb.	2.75 @	4.00
Citronellol, bottles	lb.	4.00 @	5.35
Coumarin, C.P. (see Drugs and Fine Chemicals).			
Diphenyl oxide, bottles	lb.	.90 @	1.15
Diphenylmethane, bottles	lb.	1.75 @	2.00
Ethyl cinnamate, bottles	lb.	3.50 @	4.50
Eucalyptol (see Drugs and Fine Chemicals).			
Eugenol, cans	lb.	2.50 @	3.00
Geraniol, cans	lb.	1.35 @	5.00
Geranyl acetate, bottles	lb.	2.75 @	6.00
Heliotropin, crystals, cans	lb.	1.75 @	4.00
Indol, C-P, bottles	oz.	2.60 @	9.50
Ionone, bottles	lb.	5.00 @	14.00
Isoeugenol, bottles	lb.	3.80 @	4.25
Linalol, cans	lb.	3.00 @	5.00
Linalyl acetate, bottles	lb.	3.50 @	7.25
Methyl anthranilate, bottles	lb.	2.25 @	2.40
benzoate, bottles	lb.	1.85 @	2.25
cinnamate, bottles	lb.	3.75 @	5.00
hepetone, bottles	lb.	9.00 @	10.00
heptine, carbonate, bottles	lb.	20.00 @	26.00
salicylate (see Drugs and Fine Chemicals).			
Musk, ambrette, cans	lb.	6.00 @	6.75
artificial, ketone, cans	lb.	7.25 @	8.30
xylol, 100 percent, cans	lb.	2.15 @	2.75
Myrrhene (see Coaltar Products).			
Neroiln crystals, cans	lb.	1.40 @	2.65
Phenylacetic acid, bottles	lb.	3.00 @	5.50
aldehyde, bottles	lb.	5.00 @	8.25
Phenylethyl alcohol, bottles	lb.	4.75 @	5.75
Rhodinol, bottles	lb.	6.25 @	20.00
Safrol, domestic, drums, tins	lb.	.28 @	.31
imported, drums, tins	lb.	.28 @	.30
Skatol, bottles	oz.	4.00 @	10.00
Terpineol, C.P., drums	lb.	.34 @	.35
cans	lb.	.36 @	.37
Terpenyl acetate, cans	lb.	.90 @	1.25
Thymol (see Drugs and Fine Chemicals).			
Vanillin (see Drugs and Fine Chemicals).			
Yara yara crystals, cans	lb.	1.50 @	3.00

Harold King, of King & Howe, botanical drug importer, this city, is making a middle western trip, combining business and pleasure.

Registration and analysis of pharmaceutical preparations are required in Bolivia by a law effective this month, according to the United States Department of Commerce. No entry of such preparations is permitted until registration is completed. Two samples of each product are required for analysis, together with separate applications for each on stamped paper, costing 1 boliviano.

Essential Oils

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Gums and Waxes

Shellac Prices Turn Strong on Rising Costs for Futures—Carnauba Firmer, Following Liquidation of Old Crop

Strong markets for carnauba and beeswax, and advancing prices for shellac were prominent features in the market for gums and waxes last week. Business in spots and futures was excellent in these articles particularly. Aloe continued strong and arabic was retained at unchanged prices with competition fairly active. Camphor was firm under a steady demand for fairly important quantities. Myrrh continued strong on absence of much stock.

The carnauba market strengthened due to liquidation of the greater part of the old crop and the consequent stiffening of prices in the primary market. Offerings had the unique character of covering two or three months, indicating that the new crop was beginning to affect the market in very firm spot position. Importations of camphor during the period January-July, 1928, with comparative figures for 1927, equivalent period, were as follows:—

	Pounds	
	1928.	1927.
Natural, crude	2,712,665	1,272,154
Refined	704,191	768,038
Synthetic	831,060	1,570,172
Totals	4,247,916	3,610,364

Chicle.—Importations for the January-July period this year totaled 9,241,197 pounds as compared with 7,772,190 pounds landed during the equivalent period, 1927. A very firm and steady market continued to prevail.

Gamboge.—Steady prices were the rule, with sellers showing no disposition to shade under competitive conditions. Stocks were moderate in size, yet them were sufficient for more than current takings.

Mastic. — The replacement market was very firm, giving a sturdy undertone to spot prices and eliminating competitive tendencies from the local trade.

Myrrh.—Small stocks were the rule and hence the absence of demand exceeding jobbing volume was without influence on the firm maintenance of local quotations.

Olibanum.—A rather quiet market prevailed, buyers trading in hand-to-mouth quantities in most instances. Stocks were moderate in size and held in very firm hands. Replacements over the next few months intervening between now and new crop were bound to be small.

Current prices on gums, waxes, and shellac, formerly printed on pages 4 and 8, are now printed at the end of this market report.

Brazil. Quantities offered were not normal in size. Demand among dealers was good here and a tendency to bid for supplies tended to keep the market to a strong position.

Cables covering beeswax indicated low stocks of bleaching grades in the various primary markets. Furthermore, the prospect for new crop African was said to be poor, estimates being for a production less than that last year when a subnormal crop was produced. Naturally, prices were all very firm.

Shellac was strong most of the week. Bleachers advanced prices sharply and based on the increase in Calcutta and London quotations, the rise here was much of a feature. T. N. and superfine were also raised in the spot market, reflecting the higher rates in the primary markets. Offerings from the Calcutta market were large—surprisingly so considering the estimates covering the Calcutta stocks unsold from the Bysacki crop. Furthermore, the quantities bought here were comparatively heavy and contrasted with some reports of business being none too active.

Myrrh was undersupplied in this market; local dealers could hardly withstand a marked increase in consuming demand. Prices were strong and expansion in taking would probably bring higher positions promptly. Benzoin was quiet but very firm.

Comparative Values

Prices were changed during the past week as follows:

Advanced	Reduced
Carnauba, No. 3, chalky, 1c. per lb.	Carnauba. No. 1, 1c. per lb.
No. 3.North Country, 1c. per lb.	
Shellac, T. N., spot, 2c. per lb.	
London, Oct., 1c. per lb.	
Dec., 1.1c. per lb.	
Calcutta, ½c. per lb.	
superfine, 1c. per lb.	
bonedry, 2c. per lb.	

Gums

Aloe.—A strong market ruled, though demand was not so pressing during the past week. Stocks were in firm hands and prices were free from competitive influences.

Arabic. — Competition was fairly prominent most of the past week, but no further change in open prices was reported. Imports during the period January-July this year totaled 7,553,042 pounds as compared with 4,951,481 pounds in the equivalent period, 1927.

Asafetida.—Steady demand for quantities of moderate size was the rule last week. Prices were very firm, available stocks being too small to encourage much competition in terms of price shading.

Benzoin.—Sumatra gum was in firm position and while some fairly low prices were circulated from time to time, they were hard to confirm in actual transactions. Gum meeting U.S.P. requirements was not well stocked and was held for very firm prices.

Camphor.—Prices were firm, supply and demand checking out steadily to the end that maintenance of existing quotations was a comparatively easy matter. The call here was steady at all times and prices were generally in

Waxes

Bayberry.—Prices were 30c. to 32c. per pound but some sellers declared for 31c. minimum and refused to shade under competition.

Bees.—Prices for good bleaching waxes in shipment markets were all very firm and in excellent request. Spot prices were likewise well maintained. Cables reported that the prospect was poor for the new crop of African wax. At present it is expected to be smaller than last year when the crop was subnormal.

Carnauba.—Cables last week offered wax for shipment over a spread of two to four months. Also, the unit quantities offered were never larger than five tons and were usually under that figure. This wide spread in the shipment offerings suggested that new crop conditions were becoming influential in developing a trading point of view in Brazil. Prices had been driven too low when the old crop was being liquidated and now that there is virtually none held there a stronger undertone has developed. Dealers in this market showed a disposition to bid for wax last week, in itself a sign of strength. Stocks in this market were believed to be relatively small. Prices for the No. 3 grades were 1c. higher at 27c. to 28c. per pound. No. 1 was 1c. cheaper at 45c. to 46c. per pound and the No. 2 North Country quality was nominal.

Shellac

Shellas was a strong article during the past week. Prices for bonedry on the spot were advanced 2c. by the bleachers while quotations for T. N. were 2c. higher. London was an advancing market most of the week and Calcutta followed the movement moderately. A feature of the period was the large quantities of shellac offered from Calcutta through local agents of shippers in that market. Furthermore, the quantities bought were a feature. Individual sales by domestic houses were not always reported large but on the whole it appeared that considerable future business must have been booked if the orders placed in Calcutta for shipment over the period September-November were to serve as a criterion.

Quotations in force at the end of the week were as follows: Bonedry, bleachers, 100 barrels or more, 57c. to 58c. per pound; 50 to 99 barrels, 58c. to 59c.; 10 to 49 barrels, 59c. to 60c.;

Valuable information on Imports and Exports of Gums, Waxes, and Shellac is given in port lists beginning on page 5.

H. V. F. PRICE Inc., 130 PEARL ST. New York, N. Y.
SHELLAC Cutch Gambier Sumac

James W. Byrnes Shellac Co., Inc.
GUM SHELLAC—BLEACHED SHELLAC and SHELLAC VARNISHES
162 Front Street New York City

GUMS - WAXES - GLUES *and* GELATINES
WILLIAM H. DEY & CO., 11 Water Street, New York Phone, Whitehall 8767

ESTABLISHED 1855
Waxes of All Kinds
BEEHIVE BRAND BEESWAX—Sun-bleached
WILL & BAUMER CANDLE CO.
SYRACUSE, INCORPORATED NEW YORK
BRANCHES—New York, Chicago, Boston, St. Louis, Montreal

CARNAUBA WAX
STICKLAC
FRANK B. ROSS CO.
229 PEARL ST. N. Y. CITY

BUSINESS Opportunities Bring Results
See Page 77

HALOWAX
No. 1001

A crystalline solid of translucent neutral color. Will not support combustion. Specific gravity 1.589. Melting point 190° to 210° F. Boiling point 600° to 650° F. Leakage resistivity 4 x 10^{14} ohms per cm. square (Bureau of Standards, Bulletin 234).

It is soluble in practically all organic solvent liquids and oils when heated therewith; it is insoluble in caustic alkaline solutions and acid solutions except those that are powerful oxidizers.

It is a solvent for many aniline and other dyes; for rubber, gutta percha, many varnish gums and resins, and for other waxes when mixed in the molten state and for mineral and vegetable oils.

It is neutral and non-corrosive to metals, free of moisture and will not absorb moisture. Is high in dielectric strength and has an extraordinary specific inductive capacity. Melts to a clear liquid of low viscosity and has a faint odor.

Our engineers offer helpful cooperation in adopting Halowax to your specific needs.

HALOWAX CORPORATION
247 PARK AVENUE, NEW YORK, N. Y.
Phone: Ashland 5880

3457-B

1 to 9 barrels, 60c. to 61c.; refined, 72c. to 73c.; superfine, 50c. to 51c.; T. N., 47c. to 48c.

A change has come in the price position in bone dry shellac. In recent weeks no two bleachers quoted identical prices, there being at times a rather wide spread in the minimum views of the makers of white shellac. Last week, a survey of quotations showed three quoting 58c., one 57½c., and one 57c. per pound, being minimum figures.

London Shellac Prices

The following quotations in shillings per hundredweight have been converted to cents per pound, the calculations being based on the sterling exchange of $4.865. The result is the price of shellac in London, not in the United States; the landed price here would be approximately 2c. more:—

	September 14		September 7	
	Shillings.	Cents.	Shillings.	Cents.
October	222½	48.1	217½	47.1
December ..	212½	46.1	207½	45

One house made October 225s, December 215s, and March 207s 6d on Friday afternoon.

Day-to-day closing prices in the London market were as follows:—

	Per hundredweight	
	October.	December.
September 8.....	217s 6d	207s 6d
September 10.....	218s	211s
September 11.....	220s	211s 6d
September 12.....	222s 6d	214s
September 13.....	222s 6d	212s 6d
September 14.....	222s 6d	212s 6d

London Shellac Statistics

Statistics covering landings, deliveries and stocks in the London market since September 1 and reported under date of September 4, are as follows:—

Stock, Sept. 1...	13,329	544	1,369	15,242
Landed	1,201	115	225	1,541
Stock	14,530	659	1,594	16,783
Deliveries	343	7	26	376
Stock, Sept. 4....	14,187	652	1,568	16,407

Calcutta Shellac Prices

Quotations for USSA T.N., c.&f. New York, were as follows:—

	Sept. 14.	Sept. 7.
September-October	44¾c	44¼c
October-November	45c	..

Offerings from Calcutta were heavy during the past week. On Wednesday one importer offered and sold 800 packages and on the next day he had 2,000 packages of assorted kinds of shellac out of which he booked order for 1,100. It was estimated at the close of the week that at least 2,500 packages had been bought in Calcutta during the week.

Shellac Shipments

Shipments of shellac from Calcutta to the world during the period January-July, inclusive, were as follows:—

	Packages	
	1928.	1927.
United States	102,361	119,638
United Kingdom	50,421	45,627
Continent	69,022	47,869
Other Ports	19,882	9,263
Totals	241,686	222,397

Current Prices

(For late price changes, see page 2)

Gums

Aloe, Barbados, true, cases...	lb.	1.00 @	1.10
Cape, cases...	lb.	.14 @	.15
Curacao, cases...	lb.	.16 @	.17
gourds, barrels...	lb.	.45 @	.50
Socotrine, kegs...	lb.	.43 @	.45
Ammoniac, tears, cases...	lb.	.48 @	.50
Arabic (acacia), amber sorts, cleaned, bags ...	lb.	.10¾@	.12
first sorts, bags...	lb.	.24 @	.25
second sorts, bags...	lb.	.22 @	.23
white, bags...	lb.	.22 @	.25
powdered, barrels, kegs...	lb.	.17½@	.18
Asafetida, cases...	lb.	.24 @	.25
powdered, barrels, boxes....	lb.	.50 @	.55
Benzoin, Siam, cases...	lb.	1.30 @	1.60
Sumatra, cases...	lb.	.40 @	.42
Camphor, refined, Japanese, slabs, cases...	lb.	.60 @	.61
tablets, tins...	lb.	.73 @	.74
powdered, barrels...	lb.	.67 @	.68
Chicle, bags...	lb.	.58 @	.60
Euphorbium, cases...	lb.	.15 @	.16
Galbanum, cans...	lb.	1.10 @	1.15
Gamboge, mass or pipe, cases.	lb.	1.15 @	1.20
powdered, barrels...	lb.	1.25 @	1.30
Ghatti, soluble, bags...	lb.	.17 @	.19
superior, bags...	lb.	.10 @	.11
Guaiac, cases...	lb.	.32 @	.34
strained, cases...	lb.	.70 @	.71
Karaya, powdered, barrels, boxes, drums ...	lb.	.12 @	.30
Kino, tins ...	lb.	.55 @	.60
Mastic, cases...	lb.	.62 @	.63
Myrrh, cases...	lb.	.85 @	.90
Olibanum, siftings, cases....	lb.	.12½@	.13
tears, cases...	lb.	.14½@	.26
Opium (see Drugs, page 6).			
Sandarac, cases ...	lb.	.26 @	.30
Scammony, cases...	lb.	1.20 @	1.35
Senegal, picked, bags...	lb.	.22 @	.24
sorts, bags ...	lb.	.10¾@	.12
Storax, cases...	lb.	.37½@	.40
Tragacanth, Aleppo, 1, cases..	lb.	1.55 @	1.60
No. 2, cases...	lb.	1.45 @	1.50
No. 3, cases...	lb.	1.20 @	1.25
No. 4, cases...	lb.	1.10 @	1.20
No. 5, bags...	lb.	.85 @	.95
No. 6, bags...	lb.	.60 @	.70
sorts, bags...	lb.	.50 @	—
Turkish, No. 1, cases...	lb.	1.20	Nom.
No. 2, cases...	lb.	.75 @	.80
No. 3, bags...	lb.	.55 @	.60
No. 4, bags...	lb.	.40 @	.50

Waxes

Bayberry, imported, bags.....	lb.	.30 @	.32
Beeswax, white, pure, cases...	lb.	.50 @	.55
yellow, African, bags...	lb.	.36 @	.37
Brazilian, bags...	lb.	.40 @	.41
Chilean, bags...	lb.	.39 @	.40
refined, cases...	lb.	.41 @	.42
Candelilla, bags...	lb.	.23 @	.24
No. 1, bags...	lb.	.45 @	.46
No. 2 North Country, bags..	lb.	.35	Nom.
yellow, bags. ...	lb.	.41 @	.43
No. 3 chalky, bags...	lb.	.27 @	.28
North Country, bags...	lb.	.27 @	.28
Ceresin, domestic, white, bags.	lb.	.10 @	.11
yellow, bags...	lb.	.09 @	.10
imported, snow white, 145-147 m.p., bags...	lb.	.21 @	.23
154-156 m.p., bags...	lb.	.23 @	.25
158-160 m.p., bags...	lb.	.25 @	.27
160-165 m.p., bags...	lb.	.30 @	.32
yellow, 130-133 m.p., bags.	lb.	.12½@	—
135-138 m.p., bags...	lb.	.13 @	—
157-160 m.p., bags...	lb.	.13½@	—
167-170 m.p., bags...	lb.	.14 @	—
Japan, cases...	lb.	.17¾@	.18
Montan, crude, bags...	lb.	.07 @	.07½
Ozokerite, black, 160 m.p., bags.	lb.	.24 @	.25
green, 170 m.p., bags...	lb.	.26 @	.30
Spermacetti blocks, cases.....	lb.	.26 @	.27
cakes, cases ...	lb.	.27 @	.28

Shellac

Bone dry, bleachers', 100 barrels or more...	lb.	.57 @	.58
50 to 99 barrels...	lb.	.58 @	.59
10 to 49 barrels...	lb.	.59 @	.60
1 to 9 barrels...	lb.	.60 @	.61
refined, barrels...	lb.	.72 @	.73
D.C., cases...	lb.	.60 @	.61
Diamond I, cases...	lb.	.60 @	.61
Superfine, bags...	lb.	.50 @	.51
T.N., bags...	lb.	.47 @	.48
V.S.O., cases...	lb.	.60 @	.61

Gillespie Erskine, of the Rogers-Pyatt Shellac Company, this city, returned September 13 from a vacation of several days.

Ralph McClintock, of the MacLac Company, this city, is expected back from a New England motor tour Tuesday or Wednesday of this week.

John R. Anderson, of John R. Anderson & Co., shellac broker, this city, has decided to stay another week at the Whiteface Inn, Lake Placid, where he is on vacation with Mrs. Anderson.

September 1, the James W. Byrnes Shellac Company, Inc., this city, began the sale and distribution of the entire bleached shellac output of the Parks Refining Company, Somerset, Mass. The president of the latter company, E. S. Parks, is vice-president of the Byrnes company. The output of the Somerset plant was formerly sold to the Rogers-Pyatt Shellac Company under a contract which expired September 1.

WANTED:

An outlet for reclaimed Varnish and Varnish skins. Will sell at a bargain price to anyone who can use. Can be used in making Gloss Varnish and Paint Factory Liquids. Write for samples and full information.

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Indianapolis, Indiana

Excellent Used Equipment

CENTRIFUGALS (Extractors)
12—20, 26, 30, 36, 48, 54 and 60″ Tolhurst, Troy, Fletcher makes.

DISTILLING EQUIPMENT
10—Copper Columns, 12 to 60″ dia.
Lummus 32″ sq. Copper.
3—Lummus Stills, 300, 750 and 1,000 gals.
5—Tubular Conds., Copper, 50 to 1,200 sq. ft.

COMPRESSORS
1—Curtis Vert. Duplex 8x8″.
1—Chicago Pneumatic, Horiz. 6x6″.

DRYERS—KILNS
1—Proctor Automatic Conveyor Dryer.
4—Proctor Atmos. Dryers, 2, 4 and 6 trucks.
9—Devine, Nos. 11, 23 and 32 (vac. shelf).
2—Stokes 2′ 6″x3′ and 3x15′ Rotary vac.
2—Bonnot, 6x60′. Rotary Kilns.
1—Bartlett & Snow, 3x25′ Rotary Dryer.

EVAPORATORS AND PANS
2—Zaremba and Scott, single effects.
3—40, 75 and 150 gal. Copper Vac. Pans.

FILTER PRESSES
3—Iron, 12, 18, 24, 30, 36 and 42 in.
6—Wood, 24, 30, 32, 36 and 42 in.
4—Kelly, No. 150, 250 and 450.
7—Sweetlands, Nos. 2, 5, 10, 11 and 12.
4—Oliver, 6′x4′, 8′x6′, 8′x12′.

GRINDERS AND PULVERIZERS
6—Raymond, Nos. 1, 0, 00 and 0000.
4—Shutz-O'Neill, 16, 20, 22 and 28 in.
3—Williams Grinders and Crushers.

P..INT AND INK MILLS
5—Day, Kent and Rose, 9″x28″, 12″x30″ and 16″x40″.
8—12, 18, 20, 24 and 36″ Iron and Stone Mills.
6—Pebble and Jar Mills, Abbe Engineering and Paterson make.

KETTLES
9—Jack, open and closed, 50 to 1,000 gals.
3—Copper Kettles, 20 to 150 gals.
4—Pfaudler Enam, 1,000 to 3,000 gals.

MIXERS
5—W. & P. Jack and Plain, 50 to 300 gals.
4—Dough Mixers, 1 to 5 bbls.
3—Pony and Change Can Mixers, 8 to 40 gals.
7—Day, sizes A, B, C, D and F.

PUMPS
20—Rotary Centrif. and Piston (Std. Makes).
3—16x20x36″, 11x18x20″, Amer. Marsh Vacuum (dry).
4—Devine and Buffalo Horiz. Vacuum.

TANKS (Wood, Steel and Copper)
20—500 to 20,000 gals. capacity.
3—1,400 gal. copper (closed).

MISCELLANEOUS
Crocks: Lead Lined Equipment: Generators; Engines; FW Heaters; Hoists; Rails; Locomotives; Boilers, Coal and Gas; Condensers.

SPECIAL
1—Devine 3x9′ Double Drum Bronze Vacuum Dryer.
1—6′ dia. Buffalo Vac. Crystallizer.

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We Will Buy Your Surplus Equipment!

STEIN-BRILL CORPORATION
25 Church Street New York City
Rector 3168-9

Botanical Drugs

Current Prices

Seeds

(Continued from page 72)

Rape, Dutch, bags...	lb.	.06¾@	.07¼
German, bags...	lb.	.06¾@	.07¼
South American, bags....	lb.	No stocks	
Sabadilla, powdered, bags..	lb.	.35 @	.36
Stavesacre, bags...	lb.	.16 @	.17
Stramonium, bags...	lb.	.07½@	.08
Strophanthus, Kombe, bags...	lb.	2.00 @	2.25
Sunflower, domestic, bags....	lb.	.08 @	.08½
South American, bags.....	lb.	.06¾@	.07¾
Worm, American, bags.....	lb.	.14 @	.15
Levant, bags ...	lb.	4.40 @	4.50

Spices

Cassia, Batavia, No. 1, bales..	lb.	.13¾@	.14
No. 3, bales...	lb.	.10 @	.10¼
shortstick, bales...	lb.	.11 @	.11¼
buds, cases...	lb.	.20 @	.22
China, selected, cases...	lb.	.09½@	.10
broken, bags...	lb.	.07¾@	.08
extra, bags...	lb.	.08 @	.08¾
Saigon, cases...	lb.	.24½@	.25
Cinnamon, Ceylon 1, bales...	lb.	.60 @	.61
No. 2, bales...	lb.	.56 @	.57
Clove, Zanzibar, bales...	lb.	.26¼@	.26½
Ginger, African, No. 1, bags..	lb.	.14½@	.14¾
Cochin, abc, bags...	lb.	.16½@	.17
lemon, bags...	lb.	.17 @	.17½
Jamaica, fancy, bold, bags..	lb.	.32 @	.33
medium, bold, bags...	lb.	.24 @	.24½
grinding, dark, bags...	lb.	.21 @	.22
medium, bright, bags...	lb.	.22 @	.22½
Japanese, bags...	lb.	.17 @	.17½
Mace, Banda, cases...	lb.	.97 @	.98
Batavia, No. 2, cases...	lb.	.60 @	.61
Penang, No. 2, cases...	lb.	.90 @	.92
Nutmegs, 80s, bags, cases....	lb.	.45 @	.46
110s, bags, cases...	lb.	.34 @	.35
grinding, bags, cases...	lb.	.26 @	.27
Paprika, extra fancy, bags...	lb.	.26 @	.26½
fair, bags...	lb.	.22 @	.23
fancy, bags...	lb.	.25 @	.25½
medium, bags...	lb.	.24½@	.25
Pepper, black, Alleppey, bags.	lb.	.36½@	.37
Lampong, bags...	lb.	.36 @	.36½
Singapore, bags...	lb.	.35 @	.36
Tellicherry, bags...	lb.	.38 @	.39
red, chillies, Japanese, No. 1, bags ...	lb.	.24 @	.24¼
Mombassa, bags...	lb.	.64 @	.65
white, Muntok, bags...	lb.	.58 @	.59
Singapore, bags...	lb.	.57 @	.58
Pimento, bags...	lb.	.21 @	.22

Peek & Velsor, Inc., botanical drug merchant, this city, has distributed to the trade an attractive telephone memoranda pad, attachable to the telephone in a position permitting easy recording of notes.

Christopher Clarke, in charge of the seed department of John Clarke & Co., seed and spice broker, this city, returned last week after two weeks motoring through northern New York and Canada as far as Quebec. He returned through New England.

Tonnage Takers

among buyers of

Heavy Chemicals
Intermediates
Solvents
Paint Materials
Varnish Materials
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AUTOCLAVES
2—250-gallon Jacketed, Agitated.
1—400-gallon, Jacketed, Agitated.

DRYERS
1—Proctor Tunnel Dryer.
4—Proctor and Gordon, tray and truck.
11—Vacuum Shelf, Nos. 27, 23, 12, 11.
6—Rotary Vacuum, 3 x 15′ to 5 x 33′.
6—Drum Dryers, single and double, Atmospheric.

EVAPORATORS
8—Single, Double, Triple, Quadruple Effects; Swenson, Scott, Stokes.

CENTRIFUGALS
Copper and Steel Baskets
2—60″ Tolhurst. 30″ Troy.
4—48″ Tolhurst. 24″ Troy.
2—40″ Tolhurst. 20″ American

FILTER PRESSES
17—Shriver, Johnson, Sperry, 12″ x 12″ to 42″ x 42″.
12—Sweetland, Nos. 12, 11, 10, 5, 2.
8—Oliver, 3 x 2, 6 x 4, 6 x 6.

W. & P. MIXERS
1—Size 8, Type 3, Unjacketed, 4½ gal.
1—Size 11, Type 3, Jacketed, 9 gal.
3—Size 15, Type 7, Jacketed, 100 gal.
2—Size 16, Type 6, Jacketed, 150 gal.
1—Size 17, Type 7, Jacketed, 200 gal.
1—Unjacketed, 450 gal.
2—Unjacketed, 950 gal.
1—Size 30, Jacketed, 2300 gal.

MIXERS
6—5000 gallons, Vertical, coils.
2—Day Jumbo, 500 to 1000 gals.
15—Dough, Single and Double Blades, jack., unjack., 20 to 500 gals.
14—Sizes A, B, C and D, Day Sifters and Mixers.

KETTLES
All Types and Sizes
300 in stock—open top, closed, jacketed and unjacketed, with and without agitators, vertical and horizontal.

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Our present liquidation operations include such well known plants as—
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WAYNEWOOD PRODUCTS COMPANY
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Special Items
2—J. P. Devine, 5x33′ Rotary Vacuum Dryers, complete.
2—200 hp. H.R.T. AMES Boilers, A.S.M.E. Mass. Std.
2—Vertical Pfaudler glass lined Tanks, 10′ diameter by 14½′ high, 8700 gallons each.
3—Horizontal Pfaudler glass lined Tanks, 8′ diameter by 23′ long; 9000 gallons each. Attractively priced.
4—Truscon Steel Buildings.
Send for Your Copy of Our Latest "Play Safe" Circular.

Made of Cast Iron, Steel, Copper, Aluminum, Glass Lined, Lead Lined, Duriron and Monel Metal.
Capacities from 25 gals to 20,000 gals.

DISTILLING UNITS
10—Badger and Lummus Copper Column Units, 54″, 48″, 36″, 30″, 24″ and 12″.

VACUUM PANS
10—Copper, 25 gal. to 600 gal.
2—100 gal. Aluminum Jacketed Pans.
1—6′ Copper; 1—7′ Cast Iron.

SULPHUR BURNERS
4—Glens Falls Sulphur Burners, 4′ x 16′, complete.

CRUSHING MACHINERY
Send for our new Bulletin listing Raymond Mills, Schutz-O'Neil Mills, Sturtevant, Fuller Lehigh, Ball and Pebble Mills, Hardinge Mills, Jaw and Gyratory Crushers, Tube Mills, Dryers and Kilns.

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Send for latest list of Roller Mills, Pebble Mills, Burrstone Mills, Paste Mixers, Pony Mixers, Clarifiers, etc. Wanted: Your surplus paint machinery. Send us your list.

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WHAT HAVE you to offer? A live sales organization, with 2,000 square feet floor space and own delivery, can handle an additional line advantageously on exclusive basis only. Must be reliable and known in this territory. Should conditions warrant will put on salesmen to cover any specific class of trade. Write details as to quantity sold in New Jersey, etc., and interview will be arranged for any interesting proposition. The Almo Corporation, 391 High street, Newark, New Jersey.

ESTABLISHED CONCERN located downtown New York City. Fifteen years' experience selling imported raw materials and food products throughout United States. Have necessary warehouse facilities, etc. Interested in proposition of merit on commission basis or otherwise. Address BOX 941, care of this paper.

OLD-ESTABLISHED well-known firm at Copenhagen and Bergen-Norway, well introduced in the naval stores trade, desires to secure the representation or sole-sale for a competitive exporter of turpentine and rosin for Denmark and Norway. First class American and European banks can be given as references. Address BOX 942, care of this paper.

OLD ESTABLISHED chemical manufacturing concern in Middle West wants to add on new products in order to balance up seasonal demand of their present product. Prefer to manufacture only but can also effect distribution. Would be interested in acting as Mid-West manufacturing plant for concern in another section of country. Address BOX 943, care of this paper.

Agents Wanted

AGENTS WANTED to sell shellac varnish for established manufacturer. Address BOX 944, care of this paper.

NEW, SUCCESSFUL manufacturing organization wishes reliable representation in the various manufacturing centers. We are particularly interested in placing our line with brokers or salesmen handling such (or similar) products as coconut butter, gelatine, egg albumen, essential oils, spices, chocolate coatings, etc. The representatives we want should have experience with all or any of the following classes of trade:—Manufacturing confectioners, baker supply jobbers, flavoring extract manufacturers, jelly powder manufacturers, ice cream manufacturers, chewing gum manufacturers, bottlers of beverages, cake, cracker and pie bakers, meat packers and similar food manufacturers. We have a definite successful sales plan which absolutely guarantees success to the right representative . Address BOX 909, care of this paper.

Equipment Offered

FOR SALE.—Bottle fillers, crown cork capping machines, labelling machines, filters, centrifugal and rotary pumps. Also DeLaval and Sharples clarifiers, copper and aluminum stills, copper, aluminum and iron kettles, gas and coal steam boilers, copper columns, dephlegmators and condensers. Machinery and Equipment Co., 225 Sherman avenue, Newark, N. J.

ABBE PEBBLE MILLS: Two 4-ft. by 5-ft.; two 80-gallon liquid interchangeable mixers; three pair of 50-gallon paste mixers; five 16 by 40 roller paint mills. Irving Barcan Co., 30 Church street, New York, N. Y. Telephone Cortlandt 2195.

MIXERS—One 100-gal. jacketed W. & P. mixer; one 250-gal. unjacketed W. & P. mixer; one 600-lb. De Laval clarifier; one Shriver lead 18 x 18 filter press; one Duriron steam jacketed kettle, 300 gals.; two 400-gal. copper, steam jacketed agitated kettles; two Rogers motor driven powder filling machines; one Colton combination tube filler, closer and clipper. Address BOX 910, care of this paper.

Equipment Offered

MILLS WATER cooler, 20 inches, 24 inches, 30 inches; Day, Kent, Ross, K. & H. also mixers. Tanks steel and galvanized iron. Steel varnish kettles and trucks, pumps. Also other equipment in good condition due to building and concentrating our factories. Location middle west. Also plant for sale. Let us have your inquiries. Address BOX 921, care of this paper.

LABORATORY pebble mill, 3 roll Day 12 x 30 mill; new 200 gal. jacketed kettle, revolvator; 20 in. stone mill, Kent; 3 roll 6 x 14 Ross laboratory mill; lead mixer. Reply BOX 940, care of this paper.

FOR SALE:—Equipment of chemical color plant, including filter presses, dry powder mills, paint mills, paste mixers, dough mixer, blowers, motors, etc. Bargain prices. Commercial Metal and Smelting Co., 500 Commercial street, Boston, Mass.

ROSS THREE roller mill, 12 x 30; laboratory mill, dough type mixers, copper and steel jacketed kettles, revolvator; other machinery. All located at our showroom, 50 West Third street, New York. Storms-Harvey Co. Spring 8955.

Equipment Wanted

FOR CHEMICAL plant, filter presses, dryers, pulverizers, stills and miscellaneous equipment. Give particulars and price in letter. Address BOX 912, care of this paper.

COPPER STILLS and kettles, 25 to 400 gals.; cast-iron filter presses; storage tanks, 2,000 to 20,000 gals.; autoclaves, 1 to 10 gals. Address BOX 913, care of this paper.

COPPER KETTLES, powder mixers, fillers and several large tablet machines wanted. Address BOX 951, care of this paper.

WANTED—One or two liquid paint mixers of approximately 250-300-gal. capacity. National Varnish Company, Long Island City, N. Y.

Formulas Wanted

INDUSTRIAL FORMULAS wanted for the manufacturing of items whereas expensive machinery is not necessary. High prices paid to anyone having anything bona fide to sell. Address Manuel, P. O. Box 1686, Havana, Cuba.

Materials Offered

LINOLEATE - MANGANESE — True linoleate made from pure linseed oil only, completely dehydrated. "Every pound the same." Made and sold by the Pantasote Leather Co., Passaic, N. J.

FOR SALE: High quality red oxide of iron. Iron contents 90 percent; bright color. At a very reasonable figure in carload shipments. Acme Oil Corp., 189 N. Clark street, Chicago, Ill.

FOR SALE: Bentonite, a suspensory agent used in cold water paints and similar products, excellent colloidal mixture for soaps and cleansers. Also suitable for use in paste, insecticides, polishes, asphalt emulsions, etc. Acme Oil Corp., 189 N. Clark, Chicago, Ill.

FOR SALE: Carbonates and sulphates of strontium, natural and precipitated; chloride, hydrate, oxide, bromide, iodide, lactate of strontium. Light aluminum hydrate, translucent. Prussian blues—chrome yellows. Geo. Gignoux, manufacturer, Lyons (France).

Positions Vacant

UNUSUAL OPPORTUNITY—Varnish and lacquer chemist or superintendent required for technical sales. Applicant should have wide experience in the production of all types varnish and some knowledge of lacquer, and should be willing to travel. Liberal salary and permanent position with firm of good standing. Apply with full particulars. Address BOX 936, care of this paper.

COLOR MIXER and chemist for lacquer factory. Give qualifications in first letter. Address BOX 949, care of this paper.

PAINT FOREMAN to take charge of department in a small paint factory. Must be able to handle men. Vicinity of New York. Address BOX 946, care of this paper.

Positions Vacant

PAINT CHEMIST wanted by manufacturer of industrial paints, located in northern New Jersey. Must be able to do analytical work, be thoroughly grounded in paint technology and have experience in industrial paints. Salary commensurate with ability. State full particulars, which will be held in strict confidence. Address BOX 947, care of this paper.

TECHNICAL EXPERT wanted to manufacture cement paste for shoe makers and pneumatic tires. Address BOX 952, care of this paper.

EXPERT CHEMIST wanted who has had experience in manufacturing adhesive paste. Address BOX 953, care of this paper.

EXPERT CHEMIST wanted of several years' experience in compounding oils and manufacturing lubricating greases. Address BOX 954, care of this paper.

Positions Wanted

SALESMAN-CHEMIST, desires position either inside or outside in technical sales or service capacity. Experience includes research, plant and sales work. Acquainted in many industries in Metropolitan district. Address BOX 937, care of this paper.

EXPERIENCED all around paint man capable of taking charge, looking for a position of responsibility; vicinity of New York preferred. Address BOX 950, care of this paper.

YOUNG MAN, 5 years of chemical education, 3 years as assistant chemist for a large paint manufacturer, wishes to make change with a future advancement. Age 23 years. Address BOX 948, care of this paper.

CHEMIST - SUPERINTENDENT. — Young man who has met with considerable success in the metropolitan area desires a position of responsibility with a recognized firm. Thoroughly understands paint technology. Capable formulator, analyst and research man. Address BOX 945, care of this paper.

EXPERT CHEMIST will shortly be open for engagement in research work. Only responsible position considered. With thorough training and years of varied practical experience, can obtain results where others have failed. Address BOX 955, care of this paper.

Processes Offered

WE OFFER manufacturing rights under Welter spray tower patents applicable for large volume economical production of free-running, non-caking powders. Markedly lower costs, cheaper than ordinary mixtures. Particularly adapted to combinations, of dry with liquid commodities, recreating new definite single crystallin product. No dust, clean working conditions. Simple and accurate control; very low maintenance. Will consider exclusive license to responsible firms in their respective field. Gold-Par, Produce Exchange Building, New York.

Services Offered

WHEN YOU need help on lacquers, when you want to duplicate or to improve a formula, when you need a new lacquer for a specific purpose, address BOX 911, care of this paper.

TRIBAL OSAGE OIL LEASES AT PUBLIC AUCTION.
SEPTEMBER 27, 1928,
BY UNITED STATES GOVERNMENT.

September 27, 1928, at Pawhuska, Oklahoma, about 20,000 acres will be offered for oil leases in quarter section tracts. Bids will be for bonus in addition to royalties, 25 percent payable on day of sale, balance in three annual instalments, with acceptable security. Within advertised area there are about 9,875 wells producing from one barrel to 400 barrels each, the total daily production for June, 1927, being about 53,000 barrels; also, there are about 40 wells drilling. All lands are now leased separately for gas. Blue print maps of area advertised, showing tracts producing oil or gas, can be had for fifty cents each, also logs of producing oil or gas wells for twenty-five cents each well. Write U. S. Superintendent, Osage Agency, Pawhuska, Oklahoma, for maps, logs or other information.

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Technical Service Company

Woolworth Bldg., N. Y. C. Whitehall, 8412

There is not a commercial center of any importance in any part of the world where the Oil, Paint and Drug Reporter does not circulate.

YOUR RELIABLE FIRM OFFERS FOR SALE

KETTLES & MIXERS

2— 20 gal. "Wear-Ever" Aluminum Kettles.
3— 30 gal. Jacketed Copper Kettles.
7— 60 gal. Jacketed Copper Kettles.
3— 250 gal. Jacketed Copper Kettles.
150—"Wear-Ever" Aluminum Jacketed Kettles, 40 and 80 gals. capacity.
2— 20 gal. Experimental Mixers.
2— 60 gal. Day Mixers.
3— 100 gal. Jacketed Mixer Kettles.
2— 150 gal. Jacketed Vallelron Mixers.
1— 500 gal. C. I. Sulphonator.
2— 900 gal. Horizontal Steel Mixers.
3—1500 gal. C. I. Reduction Kettles.
3—1800 gal. Jacketed Nitrators.

DISTILLING APPARATUS

1— 50 gal. Jacketed Copper Still.
2— 75 gal. Jacketed Copper Stills.
1—150 gal. Jacketed Copper Still.
1—300 gal. Copper Still.
2—400 gal. Copper Stills.
4—115 gal. Aluminum Jacketed Stills.
1—150 gal. Enamelled Still.
6—Copper Columns, 15 in., 18 in., 24 in., Diam.
5—Dephlegmators, 15 in., 18 in., 24 in. Diam.
9—Condensers, Assorted.

FILTERS

1—36 in. Shriver C. I. Filter Press.
1—30 in. Sperry C. I. Filter Press.
1—30 in. Shriver-Atkin C. I. Press.
4—30 in. sq. Wooden Filter Presses.
5—24 in. sq. Wooden Filter Presses.
2—24 in. sq. Cast Iron Filter Presses.
3—18 in. sq. Wooden Filter Presses.
20—30 in. Filter Press Skeletons.
2—Kiefer Multiple Filters.

EVAPORATORS

1—Devine Vacuum Evaporator.
4—Jacketed Evaporating Pans, 7 ft. x 30 in.
2—Evaporating Pans, 5 x 3 ft.
2—Zaremba Evaporators, 5 ft. diam.

VACUUM PUMPS

20—Beach Russ Rotary Vacuums.
8—Devine, 4 x 6 in. and 6 x 8; Belted.
1—Stokes, 2-stage, 6 x 3 in.
1—Devine, 5 x 10 x 8.
1—Blaisdell, 14 x 10 in.; Belted.
1—Alberger, 8 x 16 x 16.

MISCELLANEOUS

5—Abbe Mills, 24 x 30 in.; 4 ft. x 5 ft.
1—Allis-Chalmers Rotary Hammermill.
1—Jeffrey Spike Roll Coal Crusher.
1—Gruendler Crusher.
4—Lehman Bean Roasters.
1—150 gal. Jacketed Autoclave.
3—Grinnell Dryers, NEW.
8—Centrifugal Extractors, 12 in. to 40 in.
2—Laundry Ironers; Gas-Electric.

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NATIONAL PIGMENTS & CHEMICAL COMPANY

Factory, St. Louis, Mo. 136 LIBERTY STREET, NEW YORK CITY

Industrial and Oil Securities

Industrials Continue Advance with Many New Highs Made—Oil Movement Picking Up —Call Money Rate 7 Per Cent

There was a continued bull market on the general industrials group last week and leading issues were pushed into new high ground, the average for the week showing a substantial advance. Pool operations were again general, and turnover was large. The market has evidently thoroughly discounted the unfavorable credit situation, and while apprehensions were expressed in some quarters regarding the rapid pace of the advance, bear operators made little headway with either their propaganda or their operations.

The trend of the market for the week, with comparison for the previous three weeks, is indicated by the Reporter's average price for 20 selected representative industrials, as follows:

September 14	215.49
September 7	202.19
August 31	207.31
August 24	207.99

New highs for the year were made by Aluminum, Ltd., American Zinc, Anaconda, Cerro de Pasco, Chile Copper, Columbia Gas & Electric, Columbian Carbon, Commercial Solvents, Corn Products, Coty, Inc., Cudahy Packing, Davison Chemical, General American Tank, Gold Dust, Heyden Chemical, International Agricultural prior preferred, International Nickel, Lambert Company, Mathieson Alkali, Parke-Davis, Pittsburgh Plate Glass, Royal Baking Powder preferred, and Union Carbide & Carbon.

Call money opened and renewed on the Stock Exchange Friday at 7 percent, ½ percent under the figure in effect on the previous Friday.

Time loans were quoted at 7 percent, for 60 to 90 days, with loans for 4, 5 and 6 months quotable at 6¾ percent. Commercial paper was quoted at 5¼ percent for prime names and 5½ to 5¾ percent for good names.

Prime bankers acceptances eligible for purchase of rediscount at Federal Reserve banks were announced by the American Acceptance Council for discount at purchase as follows:

	Bid.	Asked.
30 days	4⅝	4½
60 days	4⅝	4½
90 days	4⅝	4½
120 days	4¾	4⅝
150 days	5	4⅞
180 days	5	4⅞

Call loans against acceptances, 6 percent.

	1927 High.	1927 Low.	1928 High.	1928 Low.	Close Sept. 14.
Ahumada Lead	6⅛	2¾	5¾	2¾	3¼
Air Reduction	..	..	81⅝	58	77⅝
Allied Chem.	169½	131	205	146	198
pfd.	124	120	125⅝	120½	..
Allison Drug A	22	19½	21⅞	8	13⅞
Alum. Ltd.	..	..	134	80	134
Am. Ag. Chem.	21½	8¼	23¼	15⅝	20¼
pfd.	72⅜	28⅛	75	55⅝	69½
Am. Can, pfd.	141¾	126	147	136⅜	138¼
common	77⅝	43⅝	112¼	70½	105½
Am. Chicle	74⅜	36	89⅜	69	84
Am. Cyan. "A"	37⅞	32¼	45	39⅞	..
"B"	32½	25	53½	30⅞	35¾
pfd.	98	84	101	95	..
A. D. S.	15½	9⅝	15½	11	11¾
Am. Home Prod.	71	30⅜	81¾	59	76
Am. Linseed	72½	20⅛	135	56⅜	115½
pfd.	92½	46⅜	130⅛	86½	124
Am. Metals	49⅜	36⅛	51	39	49⅞
pfd.	113½	108	117½	111½	..
Am. Smelting	188⅝	132⅝	252¼	169	249½
pfd.	132½	119¼	142	131	136
Am. Sol. Chm, pf.	29	11	41⅞	25¼	35⅞
common	13½	6	28¼	11⅜	21
Am. Zinc	10¼	5¾	34⅞	6⅜	32½
pfd.	51¼	35	98	40	90½
Anaconda	60½	41¾	79¼	53⅜	77¼
Anglo-C. Nitrate	31½	14	54·	26½	40⅞
Archer-Dan.	63	38	97	54½	80¼
pfd.	112⅜	106	115¼	86⅜	..
Armour, Del., pf.	98⅛	79	97½	86⅜	94⅜
Armour, Ill., A.	15⅞	9¼	23½	11¼	21⅜
Armour, Ill., B.	9⅛	5	13½	6⅜	10⅝
pfd.	86⅜	60	91½	67½	89⅜
Atlas Powder	70	56½	101	63	81
pfd.	107	98	109	102½	..
Beech-Nut	74¼	50¼	83½	70⅝	78¼
Bon Ami	68½	53⅜	78⅜	65¼	73½
Borden	169	101	187	152	166
Butte C. & Z.	5½	3⅜	10	4½	8½
Butte & Sup.	11⅜	7⅜	16⅜	9	..
By-Prod. Coke	92½	66	80¼	65	74½
Calla. L. & Z.	2⅝	1¼	5⅜	1⅜	3
Callu. & Ariz.	121½	61½	120¼	89	108½
Callu. & Hecla	24⅜	14½	33⅞	20¼	32½
Can. Ind. Al.	43½	22	50⅜	36¼	..
Celluloid Corp.	117	44	122	91⅝	..
pfd.	91¼	82½	97¼	89	..
Cerro de Pasco	71½	58	93⅞	61½	93⅞
Certainteed	55⅜	42	63½	40⅝	44⅝
1st pfd.	118¾	106	120	119	..
Certo Corp.	80	46	79½	71	..
Chile Copper	44⅝	33⅛	53½	37⅝	51⅞
Coca-Cola	131	96½	177¾	127	171
Col.-Palm.-Peet.	..	..	123⅞	35⅞	80¼
Col. G. & E.	98⅜	82⅞	127½	59½	124¼
pfd.	109⅝	99½	110¾	106	107
Colum. Carbon	100⅜	66⅞	99⅜	79	99
Com. Sol.	202	152	219½	137⅞	211½
Cont. Can	86⅞	58⅜	128⅞	80¼	121
pfd.	126	120	128	123	..
Corn Prod.	68	46⅞	89⅜	64⅜	87⅞
pfd.	142¼	128	146⅜	138½	140⅜
Coty, Inc.	122½	56	222	128	219⅜
Cudahy	58⅜	43½	78¼	54	73¼
Davison	48½	26¼	63½	34⅝	60⅜
Devoe, Ray	42⅜	36½	61	40	54¼
1st pfd.	114½	101	120	108	..
Diamond Match.	147⅜	115	165	134⅝	..
Dow Chemical	99½	71	..	..	..
pfd.	107	101	170	136	..
Drug, Inc.	..	..	118	80	111¼
DuPont	343⅞	168	403½	310	391½
deb.	117	105½	121½	114	116
Eastman	175¼	126¼	194¼	163	179½
pfd.	131½	119¼	180¼	123½	..
Forhan "A"	26	17¼	34	23	..
Gen. Am. Tank.	63⅜	46	84½	60⅞	82½
Glidden	22	14½	30	20⅜	26⅜
prior pfd.	101	86	104⅞	95	..
Gold Dust	78⅜	42	110⅞	71	105½
Greene Cananea	149¼	29¼	164½	89⅝	120⅜
Hercules, pfd.	114¼	114	124	118½	..
Heyden, new	10	7¼	15	7½	15
Hires Co.	23⅞	19¼	26½	21½	25¼
Household Pr.	70⅜	43¼	77	64⅛	74⅞
Intl. Agri.	16⅜	6¼	20⅞	13	16
prior pfd.	65	33	83½	48⅝	83½
Int. Match, pfd.	95½	62	121⅞	93⅛	110⅝
Int. Nickel	89½	38¼	133¼	73⅞	128¼
Int. Salt	75	63	69	49½	..
Kenn. Copper	90⅝	60	100¼	80½	98⅜
Lambert Co.	88½	66	124½	79½	123⅝
Lehn & Fink	43	32⅜	61⅝	38	57⅝
Libby-Owens	150¼	115	140	109	131
Liquid Carb.	78⅜	45	78⅜	63½	76¼
MacA. & Forbes.	58¼	43½	57⅜	46	47
Magma Copper	57⅞	29¼	61	43⅜	59⅜
Mathieson	131¾	82	148½	117⅞	145
May Drug	..	..	26⅞	20	..
Mead Johnson	65⅝	30⅝	72	53½	63⅝
Miami Copper	20⅜	13⅞	22½	17⅜	21⅜
Natl. Dist.	56⅜	17	58½	29¼	42⅜
pfd.	69⅝	43	71⅝	51¼	..
Natl. Lead	135	95	136	115	130
pfd. A	139¾	131½	147¼	139	142½
pfd. B	115¼	104⅝	121⅜	112½	120⅛
Nevada Copper	20⅝	12⅜	27	17⅜	25⅜
N. J. Zinc	194⅜	178	260	180¼	224
Neve Drug	..	..	46½	24	29½
Owens Bot.	85½	73	95⅞	74½	78½
pfd.	120	115	117	114¾	..
Parke-Davis	40	27½	51	38	46⅜
Patino Mines	27½	18½	42	23⅞	33½
People's Drug	50	20⅝	69	53	67½
Pitts. Pl. Glass.	269	198	300	210	288
Pratt & Lam.	58½	48	61¼	51½	57⅞
Proc. & Gam.	245	178	300	247	283½
Prophylactic	71	55	91	63	..
Royal Bak.	339	161*	287	205	280
pfd.	108½	93⅜	111½	104	106⅜
St. Joe Lead	43⅞	36	49	37	45
Schulte	57	47	67½	49⅞	58⅜
pfd.	123	116¼	129	118⅞	..
Sher. Wil.	..	..	74½	65½	..
Silica Gel., ctf.	20⅜	13¼	29	17	23¼
Stan. Pl. Glass.	4⅜	2	7⅞	2¼	..
pfd.	15⅞	10	40	10	..
Swift & Co.	130	115⅝	137	125	..
Swift Intl.	28½	18⅛	34½	25⅜	32
Tenn. C. & C.	14¼	8½	16⅜	10½	14¼
Tex. Gulf Sul.	91⅜	49	80⅝	62⅛	72
Union Carbide	154½	98⅜	184	136½	175½
United Cigar	38¼	32⅜	34⅝	22⅞	29
United Dye	10	3¼	12	4	..
pfd.	49	36¼	74⅞	45⅝	..
U. S. Gypsum	100⅜	83⅞	100	55	..
U. S. Ind. Al.	111⅝	69	124⅞	102¼	121¼
pfd.	119	107¼	122¼	119	..
Utah Copper	161	111	160	139	..
Vick	63⅝	48	78⅞	58	72
Va.-Car., 6 pc. pr	48½	26⅛	55½	44⅝	52⅛
7 pc. pr.	91	73	97	88⅛	96
new	15½	7½	16¾	12	15⅛
Vivaudou	39¼	20¼	25⅝	11⅜	14½
pfd.	118½	97	100	78	..
Wesson Oil	77	50½	85⅝	67	74½
pfd.	102¼	95	108	102	..
White Rock	41⅛	26	44⅝	34⅛	38
Wilson, pfd.	84⅜	58	77⅞	66	69⅜
Wrigley	72⅜	50⅞	84	68¾	76½

* Bid.

Oil Securities

There was a strong and active market for oil stocks late in the week, but the market lost a little ground from the previous week's levels. An encouraging sign, however, was the appearance of pool operations in a number of issues. Tide Water came in for heavy buying on reports that prominent Detroit interests had bought heavily, and Texas Corporation was also in strong position, on reports of more favorable developments in the affairs of the company.

The trend of the market for the week, with comparison for the previous three weeks, is illustrated by the Reporter's average price for 20 selected representative oils, as follows:

September 14	56.14
September 7	59.81
August 31	53.85
August 24	57.55

New highs for the year were made last week by Atlantic Refining, Barnsdall "A," California Petroleum, Imperial Oil, Midcontinent Petroleum, Prairie Oil, Texas Corporation, Tide Water Oil, and White Eagle. New lows were made by Carib Syndicate and New Bradford Oil.

	1927 High.	1927 Low.	1928 High.	1928 Low.	Close Sept. 14.
Amerada	37⅝	27⅞	38	27⅛	33½
Am. Maracaibo	7⅛	2⅜	6⅝	3⅛	4½
Anglo-Am.	21⅝	17⅞	22⅜	17	19
A. G. W. I.	43½	30⅜	59⅞	37¼	54
pfd.	41¼	29⅜	58⅞	38	..
Atl. Ref.	131⅜	104	174⅞	95¾	172½
pfd.	119	115½	118¼	116	..
Barnsdall, A	35½	20⅞	36¼	20	35⅜
Beacon Oil	18¼	14	20¼	12¼	18
Borne-Scrim.	69	50	56	48⅝	..
British-Am.	40	20½	40	32⅜	..
Buckeye P. L.	60	45	76	58	..
Cal. Pete.	32⅞	20	36	24	36
Carib. Syn.	26	14⅜	23⅞	12½	12⅝
Chesebrough	126	76½	161	117¼	140
Cities Service	58¾	40¼	71¼	54	68
pfd.	85⅞	87½	103½	94½	99⅝
pfd. "B"	87⅝	77⅝	96⅝	85⅝	..
Colombia Syn.	3½	1⅜	2¾	1⅛	1⅜
Cons. Royalty	9¾	6⅜	7⅛	6⅜	..
Cont. v.t.c.	22⅝	16⅛	23	13	17⅛
Creole Pet.	14⅞	9⅞	17⅜	10¼	12⅜
Crown Cent.	3	.50	3¼	.76	1⅝
Cum. P. L.	137	80	114	88	..
Eureka P. L.	68	47	88	64½	70
Freeport-Tex.	105½	34	109¼	55	66½
Galena	13½	3½	13	4⅛	..
Gen. Asphalt	86¼	65	94⅞	68	76¼
pfd.	144⅞	107¼	141½	110¼	..
Gulf Oil	118	86¼	147⅜	101⅞	126½
Houston	174⅜	60⅛	167	119	138¼
Houston Gulf	12⅜	8½	22½	11⅛	14⅜
Humble	68½	54	84⅝	59¼	83⅛
Illinois P. L.	182	123⅜	245	176½	..
Imperial	64⅜	37⅜	76½	56⅜	75½
Indep. O. & G.	32⅜	17⅝	31⅞	21⅜	29½
Indian Refining	12⅛	7¼	39⅝	9	32⅞
Indiana P. L.	92	61	89¼	74⅝	81
Inter. Pet.	39	28¼	51¼	37	38½
Lion Oil	27½	20	32⅜	20	29½
Lone Star	59⅜	37	57	48½	54⅝
Louisiana Oil	18⅛	10	19⅜	9⅜	15½
pfd.	97	85	94½	80	..
Maracaibo	22⅜	12	25½	12½	17
Maracaibo Exp.	22⅜	12	18⅛	15⅜	..
Margay	52	12	48½	36½	..
Marland	58½	31	44½	33	40
Mex. Pet.	320	200	360	250	..
Mex. Seab.	9¼	3	39	4⅝	29½
Midcontinent	39⅝	26½	35¼	25⅛	35⅛
pfd.	105	97	115⅛	103¼	..
Mid. States	3⅜	1⅝	7⅝	2⅜	4½
Mount. Prod.	29	22⅜	28⅝	22⅜	22⅜
Nat. Supply	97⅞	76	115	87½	..
pfd.	120	114½	119	115	..
Nat. Transit	24	14¼	32⅜	19⅜	21
New Bradford	5⅞	4⅞	5½	4¼	4¼
N. Cent. Tex.	12⅜	9½	13¼	10⅜	..
North. P. L.	100	70	125	94	103¼
Ohio Oil	67⅞	52	68¼	58½	61½
Oil Well Supply	44⅜	31¼	41	20¼	25¼
pfd.	110	102¾	110½	97	..
Pan-Am.	65⅞	40⅛	53⅜	38¼	43
B	66⅜	40¼	54⅜	37⅜	44¼
Pan-Am. W "B"	37⅝	16⅜	28⅜	15½	17⅞
Pandem	9⅜	1⅜	6	2½	2⅜
Panhandle	18⅞	2	21⅜	11½	15¼
Pantepec	12⅛	7	15¼	8½	12⅜
Pennok	13½	5¼	7⅜	5⅝	..
Phillips Pet.	60¼	36¼	44⅝	35¼	41
Pierce Oil	1½	..	1⅝	1½	2⅜
pfd.	24	13½	30½	16¼	24¼
Pierce Pet.	5½	2½	6⅝	3½	4¼
Prairie Oil	55½	45⅜	56	46	46⅝
Prairie P. L.	190	122	223	172	186½
Prod. & Ref.	33⅞	16⅜	28⅝	16	24⅜
pfd.	50	36⅞	49⅝	41	..
Pure Oil	32½	25	27½	19	24⅜
pfd.	115½	111¾	119	108	..
Reiter-Foster	15¼	3½	12⅞	4¼	10
Richfield	28⅝	25⅜	53	23½	50
Royal Dutch	54½	44¼	59½	44⅝	58½
Salt Creek Prod.	35½	27¼	35	26¼	25⅜
Shell Union	31⅜	25⅝	31	23¼	27½
Simms Pet.	26⅜	14¼	25¼	18⅝	22¼
Sinclair	22⅜	15	30⅜	17⅝	27⅛
pfd.	104½	97	109½	102½	..
Skelly Oil	37⅝	24½	34	25	33⅜
Solar Ref.	201½	180	186	167	..
South Penn.	41½	34½	53	26⅜	..
South P. L.	15⅞	15⅛	35⅞	12	16⅜
S. W. Pa. P. L.	86	70	102	70	..
S. O. Cal.	60¾	50⅜	63⅞	53	59⅞
S. O. Ind.	81½	64⅜	82⅜	70⅞	76
S. O. Kan.	20⅞	14⅝	27⅜	15	21⅝
S. O. Ky.	130	114¼	136½	122¼	126¾
S. O. Neb.	49¼	40	45¼	39⅞	..
S. O. N. J.	41⅜	35½	49	37⅜	45⅜
S. O. N. Y.	34½	29⅜	41½	28⅜	36¼
S. O. Ohio	87½	73	84⅜	71	84⅜
pfd.	122	117¼	125	117	..
Sun Oil	34⅞	30	59½	31½	57⅜
pfd.	101⅝	99	110	100	..
Superior	6½	3⅛	9½	2½	6⅜
Swan & F.	21	14½	23½	16	..
T. & P. C. & O.	18⅞	12	17½	12⅜	14¼
Texas Corp.	58	45	72⅞	50	71⅜
Tidal Osage	26½	17	22⅞	13	18
Tidewater	29¼	19	29¾	19⅝	29½
pfd.	89¾	85	94½	87	..
Tide W. Assn.	19½	15⅜	25	14⅜	24½
pfd.	90⅜	85	90	81⅞	89⅞
Transcont.	10⅜	3⅜	10¼	6⅜	8¼
pfd.	89	63½	90	82¼	..
Union Calif.	56½	39⅝	57	42⅜	51
Union Tank	127½	94	128½	113⅜	..
Vacuum	149⅞	95¼	136⅜	72	80½
Venez. Pet.	7⅜	4⅛	6⅝	4⅞	5
White Eagle	27½	20⅜	28	20½	27⅜
Woodley	8	4¾	8¼	4⅞	4⅞

Dividends Reported Since Last Week's Issue

	Stock.	Class.	Amount.	Payable.	Of Record.
Air Reduction	Com.	Q.	50c.	Oct. 15	Sept. 29
Aluminum Company	Pfd.	Q.	$1.75	Oct. 1	Sept. 15
American Gas & Electric	Com.	Q.	25c.	Oct. 1	Sept. 17
American Gas & Electric	Pfd.	Q.	$1.75	Nov. 1	Nov. 10
American International	Com.	S. A.	$1.00	Oct. 3	Sept. 24
Brillo Manufacturing	"A"	Q.	50c.	Oct. 1	Sept. 15
British-American Oil	Com.	Q.	25c.	Oct. 1	Sept. 14
Boots Pure Drug, Ltd.	....	Q.	6 %	.....	.....
Canadian Car & Foundry	Pfd.	Q.	1¾%	Oct. 10	Sept. 26
Canadian Salt	Com.	Q.	$2.00	Oct. 1	Sept. 22
Conley Tank Car	Com.	Q.	50c.	Sept. 30	Sept. 20
Conley Tank Car	Pfd.	Q.	$2.00	Sept. 30	Sept. 20
Consolidated Gas (New York)	Pfd.	Q.	$1.25	Nov. 1	Sept. 29
Continental Can	Com.	Q.	$1.25	Nov. 15	Nov. 5
Continental Can	Pfd.	Q.	$1.75	Oct. 1	Sept. 20
Dominion Glass	Pfd.	Q.	1¾%	Oct. 1	Sept. 15
General Bronze	Pfd.	Q.	1¾%	Oct. 1	Aug. 31
Gold Dust Corporation	Com.	Q.	$1.25	.....	.....
Hazel-Atlas Glass	Com.	Q.	50c.	Oct. 1	Sept. 18
Hazel-Atlas Glass	Com.	Ext.	12½c.	Oct. 1	Sept. 18
International Match	Com.	Q.	80c.	Oct. 15	Sept. 25
International Match	Parf. Pf.	Q.	80c.	Oct. 15	Sept. 25
Indian Refining	Pfd.	*	$47.55	Oct. 1	Sept. 25
Indian Refining	Pfd.	Q.	1¾%	Oct. 1	Sept. 25
R. F. Johnson Paint Company	8% Pfd.	Q.	2 %	Oct. 1	Sept. 15
Kansas Gas & Electric	Pfd.	Q.	1¾%	Oct. 1	Sept. 14
Margay Oil	Com.	Q.	50c.	Oct. 10	Sept. 20
Merrimac Chemical	Com.	Q.	$1.25	Sept. 29	Sept. 15
National Licorice	Pfd.	Q.	1½%	Sept. 29	Sept. 14
National Supply	Pfd.	Q.	$1.75	Sept. 29	Sept. 19
Northeastern Yeast	Com.	Q.	$3.00	Sept. 15	Sept. 12
Parke, Davis & Co.	Com.	Ext.	10c.	Sept. 29	Sept. 18
Parke, Davis & Co.	Com.	Q.	25c.	Sept. 29	Sept. 18
People's Drug	Com.	Q.	25c.	Oct. 1	Sept. 8
People's Gas, Light & Coke	Com.	Q.	$2.00	Oct. 17	Oct. 3
Procter & Gamble	8% Pfd.	Q.	$2.00	Oct. 15	Sept. 25
Prophylactic Brush	Com.	Q.	50c.	Oct. 15	Sept. 29
Rigney & Co.	Pfd.	Q.	25c.	Oct. 1	Sept. 20
Royal Baking Powder	Com.	Q.	$2.00	Sept. 29	Sept. 15
Royal Baking Powder	Pfd.	Q.	$1.50	Sept. 29	Sept. 15
Shaffer Oil & Refining	Pfd.	Q.	$1.75	Oct. 25	Sept. 30
Standard Royalties Wewoka	Pfd.	M.	1%	Sept. 15	Aug. 31
Southern California Gas	Pfd.	Q.	37½c.	Oct. 15	Sept. 29
Spang-Chalfant	Pfd.	Q.	$1.50	Oct. 1	Sept. 20
United Verde Extension Mining	Com.	Q.	50c.	Nov. 1	Oct. 5
Vivaudou	Pfd.	Q.	$1.75	Nov. 1	Oct. 15
Warner-Quinlan	Com.	Q.	50c.	Oct. 1	Sept. 12
Warner-Quinlan	Pfd.	Q.	1¾%	Oct. 1	Sept. 12
White Eagle Oil & Refining	Com.	Q.	50c.	Oct. 20	Sept. 28
Will & Baumer Candle	Pfd.	Q.	$2.00	Oct. 1	Sept. 15

* Covering the period from December 16, 1921, to September 30, 1928.

Financial Notes

ITALO PETROLEUM CORPORATION OF AMERICA will offer soon $3,000,000 of preferred and $3,000,000 of common stock. Part of the offering will be allotted to the Pacific Coast, where the company has about 8,000 stockholders. Proceeds of the issue will be used to pay for twelve companies held and operated under contract. Acquisition of the properties will make the corporation a complete unit of producing, refining and distributing properties, according to A. G. Wilkes, Vice-President.

INTERNATIONAL AGRICULTURAL CORPORATION and affiliated companies report for the year ended June 30, 1928, net profit of $1,446,605 after operating and administration expenses, interest, depreciation and depletion. The sum includes an award of $143,923 by the United States Mixed Claims Commission. Gross profit on operations was $3,820,562, while net operating profit amounted to $2,152,408.

The consolidated balance sheet of the company as of June 30, 1928, shows total assets of $35,493,243. Current assets were $10,491,897, of which $2,171,588 was cash, while current liabilities were $690,762.

In a letter to stockholders accompanying the report, John J. Watson, President, said that the corporation in the fiscal year ended June 30 mined and sold the largest tonnage of phosphate rock of any year in its history, but, owing to conditions of the industry, only a relatively small percentage of net profit was shown on its turnover.

WILL & BAUMER CANDLE COMPANY has called for redemption 10 percent of its outstanding preferred stock, as of October 1, which will leave slightly more than $1,000,000 of preferred outstanding.

LOUISVILLE GAS & ELECTRIC COMPANY stockholders have approved an increase in capital from $45,000,000 to $90,000,000, of which $50,000,000 will be preferred and the remainder common stock.

NOVADEL PROCESS CORPORATION stockholders have approved the proposed plan for the combination of the Novadel Process Corporation with the Agene Corporation. The merged company will be known as the Novadel Agene Corporation.

AMERICAN DRUGGISTS' SYNDICATE reports for the six months ended June 30 net income of $378,608 after charges, equal to 37 cents a share on 1,000,000 shares of 6 percent guaranteed capital stock of $10 par, as compared with $521,085, or 52 cents a share in the corresponding period last year.

AMERICAN CHICLE COMPANY directors have declared a 100 percent stock dividend in the form of an issue of 500,000 shares of additional common stock, no par value, in the ratio of one share of new stock for each share now held. The new stock will be put on an annual basis of $2 a share. The present annual dividend rate is $3. Stockholders will vote October 15 on the proposal. The directors also voted to retire the $120,100 of 6 percent preferred stock outstanding and to reduce the par value of the common as carried in the balance sheet from $20 to $10

CONTINENTAL CAN COMPANY directors have recommended that the authorized number of common shares be increased from 750,000 to 2,000,000 and if such increase be authorized by stockholders, a stock dividend of 100 percent be paid on November 22 to holders of the outstanding 710,000 shares of common of record November 5. This would leave 580,000 authorized shares to be issued as the company's needs might require. Stockholders will meet October 16 to vote on the proposal.

INDIAN REFINING COMPANY and subsidiaries report for the six months ended June 30, 1928, net profit of $110,533 after interest, depreciation, etc., equivalent after allowing for dividend requirements on 7 percent preferred stock to 3 cents a share earned on 785,068 shares of common stock, which will be outstanding after exchange of all old stock for new $10 shares. This compares with $20,642 or 89 cents a share earned on 22,964 shares (par $100) of 7 percent preferred stock in the first six months of 1927.

KING ROYALTY COMPANY stockholders will meet October 10 to vote on increasing its preferred stock from 6,000 to 15,000 shares and its common stock from 50,000 to 125,000 shares. The directorate will be increased from 7 to 9 members. The new stock, if authorized, will not be issued until later on.

AMTORG TRADING CORPORATION, American buying agency for the Soviet Russian government, will increase its capital from $1,500,000 to $3,000,000.

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